re-structuring your brain to discover engineer in you

PROSPECTUS
2012/2013
Welcome to the world of engineering at the Sagarmatha Engineering College. Engineers are creators, designers; innovators and problem solvers.
It gives me a great pleasure to write this message on behalf of Tribhuvan University (T.U.) to be forwarded in the prospectus of one of our affiliate institutions, Sagarmatha Engineering College.

We have been observing that every year the interest in pursuing engineering education and the desire of making contributions in the nation building amongst prospective Engineers has been growing substantially. At the same time, there has always been a great need of qualified engineers in various sectors in Nepal. Inevitably, all this has generated a high demand for affordable world-class engineering institutions in the country.

T.U., since its establishment, has taken the initiative in imparting quality education in the field of engineering. The fact that our students have been making major contributions in the local market while many have been successful in establishing themselves in the international arena, is a matter of pride to all associated with the University.

I appreciate the efforts of Sagarmatha for sharing the responsibility of producing engineering graduates and take this opportunity to applaud the efforts of Sagarmatha for their good performance right in the very beginning of its establishment. I hope that Sagarmatha maintains this standard in upcoming years and at the same time wish Sagarmatha to perform even better in the future.

Prof. Dr. Hira Bahadur Maharjan
Vice Chancellor
Tribhuvan University

I wish success to Sagarmatha Engineering College in its endeavors in the direction of attaining quality.

Dr. (Er.) Bharat Pahari
B.E. (Civil), M.Sc. Engg. (Bldg.),
Ph.D. (qty. of Engg. Edu.),
Post Doc. (Engg. Mgmt.)
Dean
Institute of Engineering
Tribhuvan University

Nepal witnessed political transformation in the country and the transition is underway. It’s time now to move forward in the economical and social transformation. This is possible only with massive development of the infrastructures and building core competence areas, so that Nepal can create wealth of nation, eventually achieving prosperity of the people.

Institute of Engineering (IOE) is a premier center for engineering education in the country and dedicated to produce capable and competent engineering human resources and thus contributing to the economic growth of Nepal in all sense. IOE is serious in achieving quality engineering education through its constituents and affiliated colleges.

Being one of the affiliated college of IOE, we believe Sagarmatha Engineering College shall carryover this mission of IOE eventually contributing to the national development process.

I appreciate the efforts of Sagarmatha for sharing the responsibility of producing engineering graduates and take this opportunity to applaud the efforts of Sagarmatha for their good performance right in the very beginning of its establishment.

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Dean
Institute of Engineering
Tribhuvan University
Welcome to the world of engineering at the Sagarmatha Engineering College. We all know that Engineers are creators, designers, innovators and problem solvers. Most importantly, Engineers help to provide a more technologically advanced, cleaner and safer world. Time and again, Engineers have proven themselves to be the messiah of transformation, from the stage of naivety to the stage of sophistication.

However, the development that we much pride on has come at a price. It has been directly responsible in disfiguring the earth and disturbing its balance. The exponential growth in population has created mounting demands on energy, food, land and water. It has overwhelmed the transportation system, waste disposal, health care, telecommunications, and other infrastructures. It has brought in new challenges and the world is yet again looking up to the engineers to come up with solutions. Building a sustainable world has become a responsibility of engineers in addition to continually contributing towards development.

The market today is looking for engineers ready to take up these new challenges head on. Students are educated in engineering fundamentals as well as made familiar with the emerging technologies. They are trained to be adaptive and flexible in the rapidly changing world.

We at Sagarmatha will be closely following your journey to success. Best wishes.

Er. Sagar Gnawali
Chairman
Sagarmatha Engineering College
Sagarmatha College of Science & Technology

It gives me a great pleasure to welcome all of you as the principal of this college. The notion that engineers are job creators and not consumers has not quite been a reality in our society. We always point at the problem of inability of our structure to assimilate the engineering graduates, but we merely throw our attention towards the inability of our engineers to assimilate other job seekers. We believe that this ambiguity needs to be addressed and hence, we aspire to make our engineers the front runners in the society.

To our prospective students let me start by saying, “Your future awaits you at Sagarmatha Engineering College.” This is an opportunity to be a part of the institution adorned with experienced hands that is ready to take you to the apogee of success. We define success of any individual as his all-round development in synchronism with improvement of the socio-economic conditions in which he/she resides.

We believe that research is an integral part of any technical studies. In fact, these researches in universities and colleges shape the direction of the society. We at Sagarmatha are committed to providing researching facilities to our staff/students through the Research & Development Unit.

The stage is set for us to break the ground in engineering education and you are joining us in this venture. We welcome you as the characters of the success story of ‘Sagarmatha’ as it unfolds.

Thus we endeavor to see our graduates not only become engineers but also successful socio-technocratic leaders.

Er. Ramesh Shrestha
Principal
Sagarmatha Engineering College
Sagarmatha College of Science & Technology

“Our future awaits you at Sagarmatha Engineering College.”

“Building a sustainable world has become a responsibility of Engineers in addition to continually contributing towards development.”
ADVISORY BOARD

Prof. Dr. Madhab Prasad Sharma
Former Vice Chancellor, Tribhuvan University

Mr. Mahabir Pun
Social Entrepreneur, Founder of Nepal Wireless, Recipient of Raman Magsaysay Award 2007 for Community Leadership

BOARD OF DIRECTORS

Er. Sagar Gnawali Chairman
Mr. Kishor Kumar Chalise Member
Mr. Puskar Raj Pakharel Member
Mr. Hom Bahadur Baniya Member
Er. Gopal Prasad Niure Member
Er. Ramesh Shrestha Member Secretary

MANAGEMENT COMMITTEE

Er. Ramesh Shrestha Principal
Mr. Kishor Kumar Chalise Chief Administrator
Er. Toshak Raj Uprety Head Department of Electronics & Communication Engineering
Er. Arun Prasad Parajuli Head Department of Civil Engineering
Er. Ganga Subba Program Co-ordinator B. Sc. CSIT
Mr. Chaturbhuja B. Nepali Admin and Account Officer

HUMAN RESOURCES

ADMINISTRATION
Mr. Ramesh K. Shrestha Principal
Mr. Kishor K. Chalise Chief Administrator
Mr. Chaturbhuja B. Nepali Account and Admin Officer
Mr. Dilliram Bhattarta Accountant
Mr. Dinesh Shrestha System Administrator
Mrs. Lauri Aryal Pandey Library Assistant
Mr. Bijaya Sharma Lab Technician
Mr. Prem Thapa Office Secretary
Mr. Dev Raj Maharjan Office Boy
Mrs. Achala Gurung Office Helper
Mr. Ganesh Lama Gardener

Mrs. Laxmi Aryal Pandey Office Secretary Cum Receptionist
Mr. Bijaya Sharma Library Assistant
Mr. Prem Thapa Lab Technician
Mr. Dhan Bahadur Thapa Office Boy
Mr. Dilliram Bhattarai Accountant
Mr. Dinesh Shrestha System Administrator
Mr. Dev Raj Maharjan Office Boy
Mrs. Achala Gurung Office Helper
Mr. Ganesh Lama Gardener

ACADEMIC
Full Time Faculty Members:
Name Designation Subject/Field
Mr. Ramesh K Shrestha Sr. Lecturer/ Principal Electrical & Electronics Engineering
Mr. Dil Bahadur Chhetri Sr. Lecturer Electronics and Communication Engg.
Mr. Ramesh Gautam Sr. Lecturer Engineering Mathematics
Ms. Ganga Subba B. Sc. Program coordinator Computer Engineering
Mr. Kishor Kumar Chalise Sr. Lecturer/Chief administrator Engineering Mathematics
Mr. Puskar Raj Pokhrel Sr. Lecturer Engineering Mathematics
Mr. Arun Prasad Parajuli Sr. Lecturer/ Head, Civil Civil Engineering
Mr. Toshak Raj Uprety Sr. Lecturer/ Head, Electronics Electronics and Communication Engg.
Mr. Pradeep Singh Lecturer Engineering Mathematics
Mr. Ramendra Kumar Lecturer Mechanical Engineering
Mr. Ananta Sunar Lecturer Civil Engineering
Mr. Suman Raj Manandhar Lecturer Mechanical Engineering
Mr. Suwash Chandra Acharya Asst. Lecturer Civil Engineering
Mr. Ramendra Kumar Lecturer Mechanical Engineering
Mr. Rakesh Dahal Lecturer Mechanical Engineering
Mr. Suman Raj Manandhar Lecturer Mechanical Engineering
Mr. Ananta Sunar Lecturer Civil Engineering
Mr. Suwash Chandra Acharya Asst. Lecturer Civil Engineering

Visiting Faculty Members:
Name Designation Subject/Field
Prof. Amala Shrestha Professor Engineering Chemistry
Dr. Surya Kant Kalauni Sr. Lecturer Engineering Chemistry
Dr. Mandra Adhikari Sr. Lecturer Chemistry
Mr. Uttam Malik Sr. Lecturer Chemistry
Mr. Hom B. Baniya Sr. Lecturer Physics
Mr. Mohan Chhetri Sr. Lecturer Physics
Mr. Mohammad Badruddoja Sr. Lecturer Physics
Mr. Bhaskar Chhetri Sr. Lecturer Physics
Mr. Roshan Khadka Sr. Lecturer Physics
Mr. Lumadi Khanal Sr. Lecturer Physics
Mr. Padmajeet Tamrakar Sr. Lecturer Physics
Mr. Pujan Raj Regmi Sr. Lecturer Physics
Mr. Laxmi Bithika Maharjan Sr. Lecturer Physics
Mr. Rockay Shrestha Sr. Lecturer Physics
Ms. Anjana Bhatta Sr. Lecturer Physics
Dr. Subash Ghimire Sr. Lecturer Physics
Mr. Santosh Bhandari Sr. Lecturer Physics
Mr. Anchal Shrestha Sr. Lecturer Physics
Mr. Sudip Lama Sr. Lecturer Physics
Mr. Shalik Ram Subedi Sr. Lecturer Physics
Mr. Ishwor Prasad Banjade Sr. Lecturer Physics

Subject/Field
Electrical & Electronics Engineering
Computer Engineering
Civil Engineering
Mechanical Engineering
Electrical Engineering
Electronics and Communication Engg.
Engineering Chemistry
Engineering Physics
Electrical Engineering
Engineering Mathematics
Computer Engineering
Civil Engineering
Computer Engineering
Computer Engineering
Mathematics
The college is a community of intellectuals, faculty members, staff and students that encourages and supports pupils in their quest for a deeper understanding of technology.

ABOUT SAGARMATHA

Sagarmatha Engineering College was established by a group of professionals dedicated to excellence in engineering education in the year 2010, under the affiliation of Tribhuvan University. An educational institution that strives to provide quality education in engineering.


The college is a community of intellectuals, faculty members, staff and students that encourages and supports pupils in their quest for a deeper understanding of technology, and fosters a personal commitment to lifelong learning, intellectual growth and the enduring values of engineering education.

As a community of faculty and staff, in partnership with students, the college seeks a total educational experience encompassing the classroom, college and community that helps develop competence, character and leadership. The College is dedicated to helping students develop analytical and communication skills, creative abilities, and a sense of civic responsibility needed in an increasingly complex society. It strives to provide them a robust grounding in their chosen field, as well as an exposure to the discovery of new knowledge.

The College seeks to create an intellectual environment that enhances individual growth while supporting scholarly activities and creative endeavors that augment knowledge and understanding at the same time.
MISSION
To impart world class education and produce internationally competent engineers with an enterprising spirit

VISION
To be the leader in Engineering Education

OBJECTIVES
While imparting education is our passion, our values lie in the qualification of knowledge over quantification. We aspire to produce competent, knowledgeable and innovative social entrepreneurs, who are ready to deal with problems and are willing to take up new challenges
ABOUT SAGARMA TH/SPOTLIGHTS

COURSES OFFERED

B. E. Civil 48 seats
B. E. Electronics and Communication Engineering 48 seats

COLLEGE HOURS

Thursday to Tuesday- 9:30am to 5:15pm
Closed on Wednesdays, and on holidays mentioned in the college academic calendar

DRESS CODE

No particular dress code is maintained by the college. However, students are not allowed to wear anything that is offensive or too casual.

STUDENTS’ CODE OF CONDUCT

• Students shall obey the procedures, directions, notices and circulars of the college, and shall not violate the rules and regulation of the college.
  • Students are required to attend lectures regularly. A student must achieve a minimum of 70% of the total attendance to be eligible to sit in the final examination.
  • Punctuality for all sessions is essential.
  • Students should make maximum contribution from their side to uplift the dignity and reputation of the college.
  • Students shall treat all employees, teachers, other students and other members of the public with respect, dignity, impartiality, courtesy and sensitivity.
  • Students shall not obtain college goods or services by making false statements or by using or presenting a false or unauthorized document.
  • Students shall not use rude and abusive language to fellow students, teachers and staff of the college.

SPOTLIGHTS

Students are given individual attention to help them work out their problems and boost their morale.

• Established and managed by experienced and dedicated professionals in engineering education.
• Excellent academic environment.
• Modern teaching methodology using the latest teaching aids.
• A mechanism whereby students are given individual attention to help them work out their problems and boost their morale so that their overall performance gets better.
• Established and managed by experienced and dedicated professionals in engineering education.
• Excellent academic environment.
• Standard Laboratories with state-of-the-art facilities.
• Excellent academic performance.
• Modern teaching methodology using the latest teaching aids.
• A mechanism whereby students are given individual attention to help them work out their problems and boost their morale so that their overall performance gets better.
• International standard Basket Ball Court.
• Round the clock Wi-Fi connectivity within college premises.
• Affiliations with various companies for graduate placement programs.
• Scholarship schemes for deserving students.

Students are given individual attention to help them work out their problems and boost their morale.
TEACHING METHODOLOGY

Each course follows a pre-determined lesson plan prepared by its respective faculty members. Students are made aware of the relevancy of the course and its practical implications.

Students get involved in practical sessions and field visits, when applicable, in order to experiment and verify the knowledge gained in classrooms.

Evaluation criteria are set for each subject, and students are made aware of the same at the beginning of the course. Feedback from tests is used to evaluate the effectiveness of the methodology followed. Extra classes are arranged where deemed necessary.

An extensive use of teaching materials including pictures, schematic diagrams, graphs and simple sketches is seen in our lecture classes.

Students are encouraged to interact during and after class hours. They are also encouraged to indulge in individual and group researches.
EVALUATION GUIDELINES

- Satisfying all the conditions mentioned in the college evaluation policy, the students must score a minimum of 40% in the internal evaluation to be qualified for the university exam.
- Students must maintain a minimum of 70% attendance to be eligible for the university exam.
- Students failing to maintain the aforementioned criteria are subjected to NQ and may not qualify for the university exam.

LABORATORY

The laboratories at Sagarmatha are equipped with the state-of-the-art instruments and equipment. Students have access to the laboratories even during off campus hours. We encourage students to indulge in research activities, and with the set-up we have, our students have a great opportunity here to sharpen their skills.

LIBRARY

In addition to the reference books available in the college library, students can hold one textbook per subject per semester. Our attempt is to make sure students are not devoid of any books that they might require. At the same time, we encourage students to start a private collection of relevant books of their own.

EXAMINATIONS & RECORD UNIT

The examinations and record unit at Sagarmatha Engineering College conducts and manages internal examinations. The unit also coordinates with the Examination Divisions at the IOE as well as Tribhuvan University. The unit also functions to manage and maintain student’s academic and personal records.
Interaction and talk programs where professionals come and share their experiences for the benefit of the students.

**TRAINING & PLACEMENT UNIT**
Sagarmatha Engineering College also has a training and placement unit of its own to look after the training and placement activities of its students. The unit arranges training programs designed for students for the sake of their overall professional skill development. The department also arranges internship programs and on-the-job training sessions for Sagarmatha Engineering College students.

The unit basically functions to help students liaise with the actual industry and job market to make their transition from student life to professional life smoother. As such it works for the placement of Sagarmatha Engineering College students. The unit also organizes and conducts interaction and talk programs where professionals come from the industry and share their experiences for the benefit of the students. Entrepreneurship workshops are also organized from time to time.

**RESEARCH & DEVELOPMENT UNIT**
College seeks to explore and encourage the research enthusiasm of faculty and students. Research and development unit focuses on building the sustainable research platform and contributing to the development of engineering sector as a whole. This unit ensures that the students are not deprived of the international norms and standards of teaching methodology in which research is the integral part.

**EXTRA COACHING CLASSES**
In addition to the regular classes that run as per the college schedule, special coaching classes are arranged by the college for students who are facing difficulties in any particular subject. These classes are conducted by the college during off-college hours without any extra financial burden on the students.
STUDENTS’ COUNSELING

The academic unit of the college constantly monitors students on an individual basis. The unit has a special mechanism to spot students who might be facing problems (academic/non-academic) and work closely with them to help them tackle these.

INTERNET AND WI-FI

The college maintains more than 1 Mbps of internet connection. All computers and laboratories are connected to the internet. Students can also enjoy round the clock Wi-Fi facilities within college premises.

FIELD VISIT

Regular field visits are arranged the college. These field visits are aimed at making students acquainted with the real-time scenarios of what they have learned in class room and text books.

SPORTS

To encourage students’ participation in extracurricular activities, the college maintains international standard basketball and volleyball courts. Badminton and table tennis facilities are also available. The college also motivates students to indulge in creative writing and publish their thoughts and feelings.

SURVEY CAMPS

An annual twelve-day Survey Camp program is organized by the college in order to train students enrolled in the 3rd year of B.E Civil Engineering. Students obtain extensive hands-on experience in the use of land surveying instruments as well as the essentials of survey practice in the course of this camp.

Further application exercises include route surveys, topographic mapping and construction surveying. The survey camp also includes fieldwork, computations, analysis and presentations.

STATIONARY & PHOTOCOPY SERVICE

The college houses the stationary and photocopy center where the students can have access to relevant lecture notes and hand outs and stationary items. It facilitates binding, lamination, printing and photocopy and related services for the students.

CAFETERIA

The college cafeteria serves snacks, lunch and dinner. Hygiene in the cafeteria is constantly monitored by the college management committee, and it is made sure that the prices of the food items available are reasonable.
Civil Engineering deals with the design, construction and maintenance of the physical and naturally existing environment.

Civil Engineering practices take place on all levels: in the public sector from the municipal through to the federal levels, and in the private sector from individual homeowners through to international companies.

INTRODUCTION

Civil Engineering is the most basic and also the most sought after professional engineering discipline. It deals with the design, construction and maintenance of the physical and naturally existing environment. It includes the design, construction and maintenance of essential infrastructural facilities such as bridges, roads, canals, dams and buildings.
CAREER PATH

• Civil Engineers can start their careers in Government Departments, Private and Public sector undertakings, Teaching and Research Institutions etc.

• Civil Engineers can find work at construction sites in managerial positions or in design and research, as well as in teaching, in government services or private concerns.

• They also work as independent consultants.

• In some fields and firms, entry-level engineers are put to work primarily monitoring construction in the field, serving as the “eyes and ears” of more senior design engineers, while in other areas, entry-level engineers end up performing the more important tasks of analysis or design and interpretation.

• Senior engineers can move on to doing more complex analysis or design work, or to the management of more complex design projects, or the management of other engineers, or on to specialized consulting, including forensic engineering.

• In short, a Civil Engineer is trained to manage men, materials, equivalents of all kinds, and the financial aspects related to his work.

CAREER INDUSTRIES

• Construction Engineering
• Earthquake Engineering
• Environmental Engineering
• Geotechnical Engineering/Soil Mechanics Engineering
• Water Resources Engineering
• Hydropower Engineering
• Materials Engineering
• Structural Engineering
• Surveying
• Transportation Engineering
• Municipal or Urban Engineering
• Coastal Engineering

CIVIL ENGINEERING COURSE CURRICULUM

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<tr>
<th>Yr./Part</th>
<th>Subject</th>
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<tbody>
<tr>
<td>I/I</td>
<td>Engineering Mathematics I</td>
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<td>Computer Programming</td>
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<td>Engineering Drawing I</td>
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<td>Engineering Chemistry</td>
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<td>Fundamental of Thermodynamics &amp; Heat Transfer</td>
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<td>Workshop Technology</td>
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<td>Engineering Mathematics II</td>
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<td>Engineering Drawing II</td>
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<td>Basic Electronics Engineering</td>
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<td>Engineering Physics</td>
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<td>Applied Mechanics</td>
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<td>Basic Electrical Engineering</td>
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<td>I/III</td>
<td>Mathematics III</td>
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<td>Applied Mechanics (Dynamics)</td>
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<td>Strength of Materials</td>
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<td>Engineering Geology I</td>
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<td>Fluid Mechanics</td>
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<td>Surveying I</td>
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<td>Civil Engineering Materials</td>
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<td>II/II</td>
<td>Theory of Structure I</td>
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<td>Hydraulics</td>
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<td>Soil Mechanics</td>
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<td>Probability and Statistics</td>
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<td>Civil Engineering Drawing</td>
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<td>Engineering Geology II</td>
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<td>III/I</td>
<td>Numerical Methods</td>
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<td>Theory of Structure II</td>
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<td>Foundation Engineering</td>
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<td>Water Supply Engineering</td>
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<td>Concrete Technology and Masonry Structure</td>
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<td>Engineering Hydrology</td>
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<td>III/II</td>
<td>Communication English</td>
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<td>Design of Steel &amp; Timber Structure</td>
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<td>Building Technology</td>
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<td>Engineering Economics</td>
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<td>Sanitary Engineering</td>
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<td>Transportation Engineering I</td>
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<td>Irrigation &amp; Drainage Engineering</td>
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<td>IV/I</td>
<td>Project Engineering</td>
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<td>Design of Reinforced Concrete Structure</td>
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<td>Transportation Engineering II</td>
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<td>Hydropower Engineering</td>
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<td>Estimating &amp; Costing</td>
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<td>Project (Part I)</td>
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<td>IV/II</td>
<td>Computational Techniques in Civil Engineering</td>
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<td>Engineering Professional Practice</td>
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<td>Technology Environment &amp; Society</td>
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<td>Construction Management</td>
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<td>Project (Part II)</td>
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</table>
STUDENTS’ VIEW

“The environment I experienced at Sagarmatha has allowed me a lot of room for growth. It has inspired and facilitated me to meet the requirement and deliver good academic performance.”
Sudan Shakya
Civil I/I

“The way I have been taught here has enriched my intellectual ability. I am, now, a more confident student than ever.”
Ayush Kuinkel
Civil II/I

“The environment at Sagarmatha is welcoming and supportive and it makes me feel at home. The teachers not only teach us but also provide personal support.”
Sudan Pandey
Civil II/I

“Sagarmatha seemed to be qualified for catering my requirement of the kind of college which could give me the multifaceted satisfaction—balance of academic and non-academic activities, homely environment, and personal growth in every respect.”
Subash Dhakal
Civil I/I

MESSAGE FROM THE HEAD OF DEPARTMENT

Civil engineers have been the builders of civilization since a very long time in the past. We focus on, and prioritize a career-focused education. Our graduates must be well-adapted to all the real-world challenges of the 21st century. This department has all the resources to claim its aim and mould its students towards perfection in the field of civil engineering. We proudly declare that we have been successful in scoring some of the highest marks in the university exams, having securing the first and fourth positions in the past. This giant leap, made in the very beginning of our educational journey, has made us more enthusiastic about delivering even better results in the future.

Mr. Arun Prasad Parajuli
Head
Department of Civil Engineering
INTRODUCTION

Electronics & Communication Engineering, a merger of two basic fields: Electronics and Telecommunication Engineering, is one of the largest and fastest growing fields of study in engineering. It is a constantly changing and ever expanding branch of engineering. It covers a wide range of applications such as Television, Radio, Computers, Telecommunication, Mobiles and Home Appliances, among others, and helps us see, hear and communicate.

ELECTRONICS & COMMUNICATION ENGINEERING

Covers a wide range of applications such as Television, Radio, Computers, Telecommunication, Mobiles and Home Appliances, among others, and helps us see, hear and communicate.

distances, supervise production and manufacturing processes and oversee the installation and maintenance of computers, peripherals and components.

Electronics and Communication Engineers design, develop, install and maintain systems related to Electrical, Electronics, Telecommunications and Computers. They also deal with computer architecture, digital communications, fiber optics, microprocessors, embedded systems, instrumentation, lasers, microelectronics, microwaves and antennas, optical communications, satellite and mobile communications, signal processing and systems design.
CAREER PATH

An Electronics and Communication Engineering career path begins with a degree in Electronics Engineering or Electronics and Communication Engineering that can prepare a student to design, build, research and test electronic circuits and components used in the high-tech devices that have become a prominent part of today’s societies.

- An Electronics and Communication Engineer can start their career in Government Departments recruited to Gazette posts through the competitive examinations conducted by the Public Service Commission.
- Similarly, they can even start their own small businesses by manufacturing Electronic circuits and devices.
- Graduates can choose to develop their careers abroad as well.
- Electronics and Communication Engineering is the largest and fastest growing field in the world.

CAREER INDUSTRIES

Electronics and Communication Engineering careers are available in a broad array of areas and industries. A career in Electronic Engineering does not typically include work that is exclusive to computers; however, many Electronic Engineering jobs are related to computer technology. Typically, Electronics and Communication Engineering careers are specialized in industries like:

- Telecommunications
- Electrical Energy
- Manufacturing
- Transportation and Automotive
- Aerospace
- Medical
- Business
- Network Management
- Multimedia and IT Industry
- Military and Defense

ELECTRONICS & COMMUNICATION ENGINEERING COURSE CURRICULUM

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<td>Computer Network</td>
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<td>Engineering Mathematics II</td>
<td>Computer Organization &amp; Architecture</td>
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<td>Mathematics III</td>
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<td>Electronic Devices &amp; Circuits</td>
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<td>Power System</td>
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<td>Micro processor</td>
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<td>Micro processor</td>
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<td>Discrete Structure</td>
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<td>Project (Part A)</td>
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<td>ICT Professional Practice</td>
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<td>RF and Microwave Engineering</td>
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<td>Digital Signal processing</td>
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<td>IV/II</td>
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<td>Elective III</td>
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<td>Project (Part B)</td>
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STUDENTS’ VIEW

“Today I stand on the point of being proud to be the student of Sagarmatha. It is, I feel, already an achievement to get enrolled here.”
Parivesh Rai
Electronics I/I

“Sagarmatha is a college where students’ abilities are explored and enhanced. The teachers here genuinely care about the students’ academic progress.”
Santosh Maharjan
Electronics I/I

“Excellent learning environment and inexhaustible helping hands at Sagarmatha has upgraded my academics. Sagarmatha has proved to be a choice for which I would always appreciate myself.”
Bikash Gurung
Electronics II/I

“Here it is comfortable, competitive, homely and what not? Everything is in par with the expectation of a technical student.”
Ishwor Shrestha
Electronics II/I

MESSAGE FROM THE HEAD OF DEPARTMENT

Electronics & Communication Engineers are the driving force of the national IT agenda: that of making each person get access to a mobile phone and each household get connected to the internet. We are committed to providing the type of manpower that can help the nation materialize this agenda. Our goal is to produce qualified graduates capable of competing in a local as well as a global market. We are committed to fostering students’ desire for learning. In fact, we want to make sure that our students not only learn and understand the subject, but also demonstrate a mastery of it once they graduate. We wish to deliver the kind of education that has a substantial practical content by encouraging project-based learning (learning by doing).

Mr. Toshak Raj Uprety
Head
Department of Electronics & Communication Engineering
ADMISSION & SCHOLARSHIPS

ADMISSIONS CRITERIA

- Students who have attended and passed the entrance exam conducted by the Institute of Engineering (IOE), T.U., can only apply for admission at Sagarmatha Engineering College. Students are selected strictly on a merit basis from amongst the applicants.
- To be eligible to appear for the IoE entrance exam, you must have secured a minimum of 45% in the Intermediate or +2 Science with two mathematics papers.
- You are also eligible for the entrance test if you have a Diploma in Engineering (please check) or an equivalent degree recognized by the Tribhuvan University.

ADMISSION PROCEDURE

Candidates, who are successful in the IoE entrance examination, are to proceed as following:

**Step 1:**
Collect the admission form available at Sagarmatha Engineering College.

**Step 2:**
Fill and submit the form along with the necessary documents listed below:
- Original copy of IoE entrance exam score card
- Copy of citizenship certificate
- Copy of mark sheet and character certificate (of SLC or equivalent)
- Copy of mark sheet and character certificate (of +2/I.Sc./I.E. or equivalent)
- Original copy of migration certificate
- Two passport size photographs of the applicant
- One Passport size photograph each of parents and local guardian

You should bring the original and get your copy attested at the time of submission by the admission officer/college official.

**Step 3:**
Candidates who make it in the college MERIT LIST are eligible for admission.

**Step 4:**
Candidates in the College merit list are to contact the admission officer for enrollment to Sagarmatha Engineering College.

Note:
Subsequent merit lists maybe published upon availability of seats, in which case the ones on the waiting list get priority.

SCHOLARSHIPS

The top 10% of students enrolled at Sagarmatha Engineering College are considered for scholarship based on the merit list of the IoE Entrance Examination, the first 5% throughout the duration of the course, and the second 5% for the first semester only.

The second 5% in the subsequent semesters are considered on the basis of the merit list of the semester exam conducted by IoE.

STUDENT COUNCIL

Student council is the representative body of students working for their welfare. It works in coordination with college management for the wellbeing of college family. It also helps college to carry out extracurricular activities for the overall development of students.

Student council of Sagarmatha Engineering College, in overall, works for enhancing both the academic as well as non-academic performance of the college.

STUDENT COUNCIL EXECUTIVE COMMITTEE

President
Mr. Navraj Bhatta

Vice-President
Mr. Niraj Devkota

Secretary
Mr. Bikal Baniya

Joint-Secretary
Mr. Rajan Acharya

Treasurer
Mr. Ram Panthi

Member
Mr. Dilip Safi

Member
Mr. Lalit Bhatta

Member
Mr. Kapil Bhattrai

Member
Mr. Abhishek Paudel

Member
Mr. Arjun Chalise
B. Sc. in
COMPUTER SCIENCE & INFORMATION TECHNOLOGY (B. Sc. CSIT)

Promising course for students who aspire to become professionals in the field of Computer and Information Technology.

INTRODUCTION

Affiliated to the Tribhuvan University, Sagarmatha College of Science and Technology was established in 2011 as a sister wing of Sagarmatha Engineering College. Under the management of Sagarmatha Engineering College, the college is running a four-year (8 semesters) bachelor level course in Computer Science and Information Technology (B. Sc. CSIT).

This is a promising course for students who aspire to become professionals in the field of Computer and Information Technology.

“No less than engineering” is a phrase that we give for this program. The course structure is truly definitive and purposeful with a total of 126 credit hours.

On top of that, the program is run by an Engineering college.

“NURTURING YOUR COMPUTER INSTINCTS IN AN ENGINEERING ENVIRONMENT”
ABOUT THE COURSE

Bachelor in Computer Science and Information Technology (BSc. CSIT) is a four-year course designed to provide students with all sorts of knowledge in the field of Information Technology and Computing.

The B. Sc. CSIT course focuses on areas in IT, database management, computer programming, information system analysis and design, communication and networks, client-server management, software analysis, design and management, security, e-business, project management, web-based technology and professional practice in IT.

OBJECTIVES

The objective of this program is to prepare students to pursue career advancement in the field of information technology. Upon the completion of this degree, students will be able to design real-world e-media products or create technical solutions to hardware and software problems, depending on their chosen area of focus.

However, the main aim of B.Sc. (CSIT) program can be enlisted as,
- To offer intensive knowledge on theory, design, programming, and application of computers.
- To provide necessary knowledge in the field of functional knowledge of hardware system and the necessary knowledge of computer software system.

ADMISSION CRITERIA

1. Students who have passed the entrance exam conducted by Institute of Science and Technology (IOST-TU) can only apply for admission at Sagarmatha College of Science and Technology.
2. To be eligible to appear on the entrance exam, you must have secured minimum 45 percent in +2 Science or equivalent.

CAREER OPTIONS

- Information Systems Management
- Network Administration
- Network Security Manager
- New Media/Internet Marketing
- Project Management
- Web Development
- Application Development
- Database Management
- Health Informatics
- Information Security and Forensics
- Mobile Computing

MESSAGE FROM THE PROGRAM CO-ORDINATOR

Computer science and information technology has and will be the subject of utmost importance because future job market is going to be desperate for computer professionals. We are running this program to produce the competent and innovative IT manpower in line with future market demands. The students, will have engineering flavour added to the regular syllabus thus making them different and more creative in the area.

Er. Ganga Subba
Program Co-ordinator