



NATIONAL
SCHOOL *of* SCIENCES

Education *for* Empowerment

NATIONAL SCHOOL *of* SCIENCES
SCIENCE & MANAGEMENT

PLUS 2 BROCHURE



MESSAGE FROM THE CHAIRPERSON

The National School of Sciences (NSS) is a premier education institute managed by the NIST Foundation that was established nearly three decades ago. The core objectives of the foundation, as an apex body, have been to establish education institutions, and provide students academic programmes from pre-school to high school to university. Today, there are nine academic institutions under the NIST Foundation across the Valley, and they offer different academic programmes such as Science, Management, IT, Pharmacy, Food Technology, Microbiology among others. I attribute the success of the institutions to the hard work, dedication and commitment of our teachers, admin staff and leadership team and trust and support of parents, students and other stakeholders.

During this long academic journey, thousands of students have graduated from the National School of Sciences, let alone other institutions under the NIST Foundation. In the constantly changing context brought about by digital technology, uncertainty and global competitiveness, I have realized that our teachers require upskilling on a constant basis, operation model needs new strategy and infrastructure and facilities demand refurbishment. Therefore, we will focus our resources on building a strong leadership team, training and developing teachers and enhancing the facilities so that all these institutions are adequately equipped, and able to produce graduates who are globally competitive, adaptable and lifelong learners.



I would like to share with you that our ultimate goal is to turn the foundation into a university, and offer its own independent academic programmes to produce human capital that are able to address the needs of society and transform the nation. I assure that the National School Sciences is the place where students achieve not only their academic ambition but also nurture their potential to become a better human being.

Dr. Madhav Prasad Baral
Chairman

MESSAGE FROM THE PRINCIPAL

It gives me great pleasure to welcome you to National School of Sciences.

As I sit down to write this, our country, Nepal, along with all nations in the world, is embroiled in the perils that have been unleashed upon us by the COVID-19 pandemics. It is safe to say that every sector of economy has been hit hard by the after-effects of this unprecedented event, more so the education sector, and it does not seem far-fetched to assume that education, as we know of, in Nepal, stands to undergo major changes, in the days to come, the post-pandemic.

The last few decades have seen a paradigm shift, when it comes to the delivery of education, globally. In the simplest of terms, this shift can be explained as follows – schools and colleges which were earlier recognized for existing as 'centres of information' are increasingly being perceived to become, 'centres of learning'. The objective is to produce learners, who are self-motivated, self-benefiting individuals and life-long learners, who can adapt to and respond appropriately to real life situations.

At NSS, enriched student experience, ranks high in our priority, and we ensure to provide every service that contributes to the academic development of a learner. From the moment a new student joins our school

community, we want them to feel a sense of happiness and belonging, as this is essential to their future success. Our experienced and dedicated teaching faculty will enable us to deliver our academic programmes in an environment that is friendly and attuned to the need of every individual student. Our curriculum will be based on the requisites of the National Examinations Board (NEB). Therefore, learning as per the national curriculum will be the core of our educational practice, whilst implementing a more rigorous progressive approach, blended with global learning. I feel privileged to be back at NSS, where I began my career in education, more than two decades back, and lead such an exciting and vibrant school, that offers great opportunities for the young people of the country. I look forward to welcoming you to ensure the best standard of your education and personal development.

Dr. Rajeev Chhetri
Principal

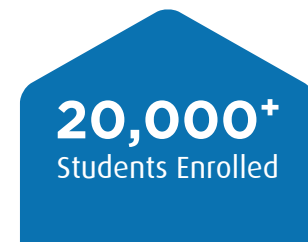


INTRODUCTION

National School of Sciences is a premier education institution, which was established in 1993. It is situated at Lainchour, a strategically important location in the Kathmandu valley, and is one of the constituent institutions under the NIST Foundation. The school has been conducting Plus 2 programme (Grade 11 - 12), now Upper Secondary school classes, both in Science and Management for the last three decades. The school follows the national curriculum under the National Examination Board (NEB), Nepal, and the medium of instruction is English except for Nepali subject. The school management is planning to introduce other courses in Law, Arts and Humanities in Grade 11-12 in the near future while the ultimate goal is to provide the continuum of education from Pre-school to Grade 12 under the National School of Sciences within the next few years.

The NIST Foundation was initiated by a group of scientists and academicians. The core objectives were to establish academic institutions, and to provide students with quality education focusing primarily on science and technology, so as to promote the science education in the country. At present, there are nine academic institutions including the National School of Sciences under the NIST Foundation, and they run classes from Pre-school to university level at different locations. The school has always emphasized the academic excellence of students and fostered a culture of innovation and collaboration. As a result, our students graduate with outstanding performance in the board examinations every year. Today, many of its alumni are engaged in the highly regarded professions and businesses within the country and abroad.

The school enrolls 2,000 students annually, in the Science and Management Stream. The students are drawn from different states, diverse culture and ethnicity allowing them to engage in intercultural understanding and to experience a rich learning. The school provides students with ample opportunities to engage in co-curricular and extra-curricular activities such as community service, and leadership programmes that ensure their holistic development which enables them to succeed not only in higher education but in life as well. In addition, the school aspires to instill in students the moral values such as integrity, responsibility, empathy, collaboration and respect that are essential for students to be a good human being while providing them with a caring, safe and supportive environment to learn thereby nature their potential.





VISION

Our vision is to become a highly respected high school in the city where its students, staff and the community feel safe and valued, demonstrate their pride, share a love for learning, and where students graduate with academic excellence to succeed in higher education and life.



MISSION

We provide our students with a holistic education in a caring, safe and supportive environment that fosters positive attitudes to learning and promotes holistic development that includes intellectual, social and emotional skills as well as their physical well-being. We engage our parents as partners to facilitate students to achieve academic excellence, inspire lifelong learning, and become confident, engaged and responsible global citizens. We help students develop the 21st century skills - creativity, critical-thinking, collaboration, communication and positive attitude, that are essential for them to succeed in life, higher education and beyond.



WHY NATIONAL SCHOOL OF SCIENCES

Located at the heart of the capital city, Kathmandu and easily accessible because of the extensive network of public transport, National School of Sciences, popularly known as NIST-NSS has been at the helm of Upper Secondary school education (earlier known as Plus 2) in Nepal for nearly three decades. Started with a total of 157 students in the Science stream only, the National School of Sciences has come a long way. The annual intake in the school hovers around two thousand students for Grade 11 Science and Management programme. Through all these years of providing academic service for aspiring students, the National School of Sciences has rightfully carved a niche for itself, and is acknowledged for providing quality education within an affordable fee structure.

Enriching the learning experience of students has always been, and will be at the core of our vision and mission, and we are always guided by the need to provide conducive environment and services for our learners to make their overall experience truly elevating. The need of the hour demands a paradigm shift in the way we cater to the educational needs of the new



generation learners. Today, education has to be imparted effectively through a balanced and holistic approach to teaching-learning i.e. the development of learner's intellectual, emotional, social and personal skills, physical well-being and artistic, creative and spiritual potentials.

The school seeks to engage students through a participatory approach to teaching-learning process, and encourages personal and collective responsibility. This is the cornerstone of the educational philosophy we subscribe to, and inculcate in our learners at National School of Sciences to enable them as life-long learners and global citizens.

Differentiated Teaching-Learning

The school emphasizes the activity, problem-solving and project-based learning, and make learners take ownership of the learning process. Our teachers engage students in active learning that helps students focus not only on what to learn but also how to learn. Students are encouraged to think hard rather than passively receive information from teachers. Thus,

students play important part in their own learning process. Teaching-learning is based on hands-on experiences and practical, and students are encouraged to actively participate in all activities aimed at enriching the learning experiences.

Competent and Experienced Teachers & Leadership Team

AT NSS, all our faculty members are highly competent and dedicated individuals who are passionate about the teaching profession, and have more than ten years of teaching experience. The school has more than 95 percent full-time teachers. The management focuses on the professional development of teachers, and provide them with workshops and trainings regularly to enable them to be familiar with the latest teaching-learning approaches and student assessment systems. We have also a strong leadership team who are accomplished and experienced in teaching, academic administration and management.

Extended Learning for Students

The school provides non-credit courses beyond the core academics that students can register for, as per their interest. For students of the year-two (Grade 12),

preparatory or refresher courses aimed at competitive examinations in the Medical and Engineering field and Chartered Accountancy (CA), and preparation for standardized tests such as IELTS, TOEFL, SATs, etc. are scheduled in the leisure time within the regular routine.

In addition, sessions on Higher studies and Career counselling are scheduled once a week wherein experienced Guidance Counsellor(s) are available for students. The Counsellor(s) help with, and guide students to make informed decisions on the area of higher studies that best suit their aptitude and interest alongside scholarship schemes available for them. The students are also guided on the application procedures and requirements. However, they are required to make pre-informed reservation of the slots available for interacting with the Counsellor well in advance. There is also an option for students keen on taking up a course on the basics of a foreign language such as Spanish, French or Mandarin during the two-year of Upper Secondary programme, provided the number of interested students registering for the course is substantial.

PLUS 2 PROGRAMME

We provide high school education (Upper Secondary) for grade 11 and 12 students based on the National Curriculum prescribed by the National Examination Board (NEB). Earlier known as Plus 2 programme, this is offered as a separate stand-alone two-year course that prepares students for undergraduate courses at university. Upon successful completion of the Secondary Education Examination (SEE) i.e. Grade 10, conducted by the NEB, students are eligible to pursue the Upper Secondary programme (Grade 11-12).

Upon enrolling in the programme, students have the flexibility to choose elective subjects as per their interest and career goals. The core subjects are mandatory for every student to pursue, and are designed to provide in-depth knowledge and understanding. The academic programme is led by the Principal ably supported by the programme Coordinators and a competent team of academic faculty in addition to an experienced team of administrators. Currently, the school offers courses in Science and Management, and plans are afoot to offer Law, Arts and Humanities in the future.



NEB Science Programme

The Science programme is designed to instill fundamental conceptual of the sciences, and generate an interest for students to pursue a major in the physical and biological sciences. The course is designed to study and teach sciences so as to encourage and enable learners to develop inquiring minds and curiosity about science and the natural world. The science students are encouraged to acquire knowledge, conceptual understanding and skills to solve problems and make informed decisions in scientific and other contexts.

After completion of the high school science programme, students can pursue undergraduate and graduate degrees in the academic programmes of Physics, Mathematics, Chemistry, Biological Sciences, Computer Science and IT, Medical and Paramedical sciences and Engineering among others, and involve in research and development in the diverse fields of Science and Technology.

Science (Subjects offered)

Grade 11	Grade 12
English	English
Physics	Physics
Chemistry	Chemistry
Mathematics	Mathematics
Biology / Computer	Biology / Mathematics

NEB Management Programme

The Management programme follows the academic curriculum prescribed by the National Examination Board (NEB), and is designed to provide students with a thorough understanding of business concepts and their theoretical underpinnings. At NSS, we provide the students of the Management stream with an array of classroom activities beyond their requisite courses in the form of non-credit courses including but not limited to communication skills, leadership skills, collaborative and entrepreneurial development to enhance, and stimulate their information literacy skills. We aim to equip the students with a strong foundation that supports advanced study in business and stimulate innovative and entrepreneurial thinking. The NEB course in Management prepares students for future careers such as advertising, banking, investment and financial services, general management, human resources, public relations and retail management among others.

Management (Subjects offered)

Grade 11	Grade 12
Accountancy	Accountancy
Economics	Economics
English	English
Nepali	Business Mathematics/ Marketing
Optional Subjects (Any One)	
Basic Mathematics	Basic Mathematics
Business Studies	Business Studies
Computer Science	Computer Science



TEACHING PEDAGOGIES AND APPROACHES

During the past few decades, a paradigm shift has taken place in the global context in relation to education. School and colleges which were earlier thought of as institutions that exist to provide instructions, are now seen as institutions that exist to produce learning. A big challenge for all educators, is to able to bring about the transformation of the role of students, from passive recipients of content to active, empowered and self-benefiting individuals. It is pertinent for teachers to provide able support and guidance as moderators, facilitators, in order to make this happen. Teachers must set up learning environment that stimulates active learner engagement with meaningful and progressively challenging tasks thus enabling them to develop

competence over a period of time.

Our classroom activities seek to break away from the traditional mold of 'lecture-based' approach, and incorporate a more dynamic 'participatory approach' in which the learner is the primary role player and teachers strive to develop them as life-long learners. The modality of teaching-learning activities follows a more progressive approach which aims to empower student learning, and make them responsible for their own learning. Regular professional development sessions organized for the teaching staff ensure that they keep abreast with the latest pedagogy and teaching-learning approaches so as to justify their crucial role as facilitators in the classroom.

FACILITIES



LEADERSHIP
PROGRAMME



TRANSPORTATION
SERVICE



SCHOOL MIS



EXTRA-CURRICULAR
ACTIVITIES (ECA)



HEALTH CARE
SERVICES



CAFETERIA





National School of Sciences (NSS)
Plus 2 Science & Management, AdvancED
Lainchour, Kathmandu



National College (NACOL)
B.Sc, M.Sc. Microbiology, BBS,
MBS, BCA, BBM (TU)
Khusibu, Nayabazar/ Banasthali, Kathmandu



**National College of Food
Science & Technology (NCFST)**
B.Bs, BBS, BCA, BBM, MBS (TU)
Khusibu Nayabazar, Kathmandu



**National Model College of Advance
Learning (NMCAL)**
B. Pharma (TU)
Khusibu, Nayabazar, Kathmandu



National Institute of Science (NIS)
Plus 2 Science, Management & Law
MBS, BCA, BBM (TU)



Bhaktarpur NIST School
Plus 2 Science & Law
Lokanthali, Bhaktapur

Patan NIST
B.Bs, BBS, BCA, BBM, MBS (TU)
Bakhundole, Lalitpur



Banepa NIST
High School - Science & Management

NIST College
B,Sc. General & CSIT, B.Sc. Agri*, BCA
Banepa - 4, Karunamarga, Kavre

**National College for
Advance Learning**
B.Sc, Biochemistry (PU)
Khusibu, Nayabazar, Kathmandu



Shemrock NIST Pre-School
NIST Primary School
Banepa - 10, Nayabus Park



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