Ministry of Industry,
Science, Technology & Innovation

Embassy of India,
Phnom Penh, Cambodia

Guidebook

Science, Technology & Innovation

KESTI

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Kampot Enrichment in Science, Technology & Innovation

FIRST EDITION

Ministry of Industry
Science, Technology & Innovation

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Foreword

Greetings, all readers!

The General Department of Science, Technology & Innovation (GDSTI) under the auspices of the Ministry of Industry, Science, Technology & Innovation (MISTI) is very pleased to introduce this book designed to promote one of the ministry's key priorities: developing human resources in science, technology, and innovation (STI).

Through prior experiences that the general department has, working with talents, researchers, and government officers, we have found that STEM (Science, Technology, Engineering, and Mathematics) education evidently has positive impacts on individuals, the industry, and the entire social economy. This book will bring readers into the world of science, technology, and innovation in Cambodia through STEM education curriculum.

This book features the achievements and experiences of STEM students and science and technology experts who have overcome many obstacles before achieving their present success. Moreover, the book also highlights STEM subjects, university programs, and roadmaps useful for high-school students who are considering to pursue a career in the fields of science, technology, and innovation.

I would like to recommend this book to high-school students interested in further education to pursue a career in the fields of science, technology, and innovation or students looking for new ideas, and to inspire ideation for those looking to explore the significance of science, technology, engineering, and mathematics in today's society. This book contains a wealth of information on science, technology, engineering, and mathematics ready to help you prepare for the future ahead.

Lastly, I would like to thank you all those who contribute in designing this wonderful book.

Respectfully yours,

Director General of Science, Technology & Innovation

Ministry of Industry, Science, Technology & Innovation



អារម្ភកថា

Foreword

STEM FIGHTER

STEM education is the teaching and integration of science, technology, engineering, and mathematics through practical experiences in daily life. STEM is important because it is the foundation fostering knowledge, exploration, and scientific questions in addition to critical thinking and problem-solving skills.

In this section, we will meet key individuals who have contributed to the development of the STEM fields and their work in Cambodia. We have received stories shared by STEM fighter from all levels and disciplines, including students, professionals in the public and private sectors, entrepreneurs, together with leaders who will describe what they have done and guide the younger generation to keep up with and become interested in STEM and be successful in STEM studies.

In this era and the future, STEM human resources are very crucial to perform tasks in various sectors of the country's economy. Therefore, STEM education is still a priority among others at all levels of the education system.



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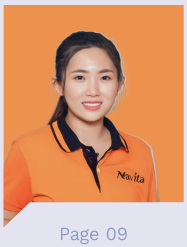
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STEM FIGHTER



Ms. KAO Menghorng

Founder of Startup STEMUNITY & Ladies in Tech

> I believe that STEM is for everyone, regardless of their background or location," Menghorng said. "As long as one has commitment and talent, they can achieve their goals and find success in life. I want to encourage more young people to follow their passion for STEM and make a positive impact on society.

Ms. KAO Menghorng, an 18-year-old, developed her passion for STEM when she was in grade 12 at Peam Chikorng High School in Kampong Cham province.

She is a co-founder of STEMUNITY along with two other friends who share her views. She is also the leader of Ladies in Tech, a project that encourages young ladies and women to engage in the technology sector.

Email: menghorngkao40@gmail.com, Tel: (+855) 97 976 5954
Facebook page: Stemunity



Teacher HUL Phalla

Physics teacher at Preah Reach Samphea General Education and Technical High School in Kampot province

> Science subjects are very important because of the rising job market in fields such as construction, electronics, information technology, energy, and industry," said Mrs. HUL Phalla, a Physics teacher at Preah Reach Samphea General Education and Technical High School.

As a Physics teacher, **Mrs. HUL Phalla** loves science and always wants to share her passion with her students. She believes that science skills can provide many opportunities for students in their future careers and contribute to the development of the country.

Email: phallahul.kh@gmail.com,
Tel: 08961526 / 0715798959

Menghorng started the project in July 2022 after participating in the Generation Future 2022 program, which supports innovators and young entrepreneurs.

STEMUNITY is a business start-up that aims to motivate students to continue studying STEM subjects and pursue careers by connecting them with industry experts and providing real-life experiences.

Over the course of three years with this project, Menghorng created three mobile apps: All about Chemistry, E-Listening and Speaking, and E-STEM. These apps help students at her school learn various subjects, solve problems, and acquire new knowledge.

She also hosted a talk show with female tech leaders to encourage girls to become more involved in the field of STEM. By participating in the project and STEM competitions, she achieved her dream of visiting countries around the world such as the United States, Sweden, Indonesia, and many others.



She always told her students about her interest in Physics, which stemmed from her high school teacher who inspired her with love, attention, and enthusiasm.

Mrs. HUL Phalla is proud of her achievements as a teacher, especially when she and her team won the gold medal in the first STEM competition organized by the National Institute of Education. She maintains warm relationships with her students and colleagues, sharing her experiences and knowledge with them even after they graduate.

She encourages her students to ask themselves a few questions before choosing their career paths: **Do you love what you do? Why do you love it? If you don't love it, can you still do it?** She reminds them that success requires dedication, responsibility, and hard work, and stresses that being a teacher requires patience, generosity, humility, and curiosity.

She enjoys helping her students learn better by doing more research, providing feedback, and spending time with them. She hopes that her students will have the potential to impact society and the world.



Mr. **PHON Soyang**

Chief of Office of Information Technology Software Development and Management Ministry of Foreign Affairs and International Cooperation

> **Skills such as information technology are in high demand in today's job market and can lead to lucrative salaries,"** said Mr. PHON Soyang, as he encouraged students to consider pursuing higher education in this field.

Mr. PHON Soyang holds two bachelor's degrees, one in Computer Science from the Royal University of Phnom Penh and the other in International Business from the University of Cambodia. He is currently preparing to complete a master's degree in information technology engineering at the Royal University of Phnom Penh.

Email: phon.soyang@mfaic.gov.kh
Tel: (855) 012689884



Mr. **SUM Sopha**

Founder of Jobify Website

#12, Street 2001, Phum Paprak Khang Tboung, Sangkat Kakab, Khan Porsenchey, Phnom Penh, Cambodia.

> **This founder advised current students to learn basic science skills such as Mathematics, Physics, Chemistry, and foreign languages, as they are necessary for higher education. He also encouraged them to learn what they love, make thoughtful career choices, and actively seek internships and volunteer opportunities to gain valuable skills and experiences.**

In the past, **Jobify** was known as a web platform that helped new IT graduates find their dream jobs and assisted companies in finding truly qualified candidates.

Email: sopha.sum@jobify.works Tel: (+855) 93 739 400
Website: Jobify.works

He stated that achieving success in work requires perseverance, patience, and a continuous commitment to personal and professional growth. He emphasized the importance of regularly developing knowledge and skills, and recommended having the courage to seek guidance and training from experienced colleagues. Additionally, he advised conducting independent research to further enhance one's abilities.

"Students should not go out to work during their first and second years of study. Instead, they should dedicate this time to honing their skills and acquiring proficiency in a foreign language," he suggested. "Students should consider engaging in volunteer work or part-time employment during their third or fourth year. This provides a valuable opportunity to apply the knowledge gained from their studies to real-life work scenarios, allowing them to gain practical experiences and further develop their skillsets. Ultimately, this will enhance their chances of securing a desirable job upon graduation."

The Jobify website was developed **by Mr. SUM Sopha**, an alumnus of the Kirirom Institute of Technology (KIT). He graduated with a degree in Software Engineering. Sopha recalled that the fourth year of his bachelor's degree was the starting point, where he learned how to create a business model and developed this business idea.

Initially, **Mr. Sopha** and his team started Jobify by participating in a startup workshop that studied 'business models'. Out of the 16 teams participating in the competition, Jobify won the first prize, and their project received support from investors from Japan.

Mr. Sopha stated that Jobify was launched in the Cambodian market in 2020 after conducting extensive research and development to make their system user-friendly and efficient.

He emphasized the importance of students engaging in social activities contribute to the community and advised against the use of drugs or alcohol.



Miss. Uy Sothearyna

Deputy General Director of Navita Healthy Food & Beverage Co.Ltd.

Group3, Sala Ballat Village, Sangkat O'Mal, Battambang Province, Cambodia

> **In the future, our company's vision is to transform traditional products into standardized products for the international market with our expertise.**

Two Cambodian siblings have helped Khmer farmers turn more than 200 tons of vegetables and fruits into high-quality and safe finished products each year.

Did you know that every year at harvest time, fruits and vegetables flood the market, causing the prices of local agricultural products to fall dramatically and even forcing farmers to leave rotting fruits and vegetables in the fields? This is not only bad for the environment but also for the economy and health of the people.

Webpage: navitafood.com/about
E-mail: info@navitafood.com

096 47 77 456
096 24 24 456



Mr. Soun Sampheavin

CEO of MOHANOKOR Engineering and Construction

> **He said that when we study, we have to study hard, and when we work, we have to love what we do and do our best. For newly graduates, he suggested not discriminating against jobs based on profit but valuing the work we do because the more work we do, the more opportunities we have.**

Mr. Soun Sampheavin is a former student from Takeo province who graduated in Civil Engineering from the Institute of Technology of Cambodia (ITC) and is currently the General Director of MOHANOKOR Engineering & Construction.

Seeing this, **Miss. Uy Sothearyna and Mr. Uy ChengHeng**, Co-founders and Deputy General Directors of Navita who received the 2022 Women Entrepreneur Award, applied their management skills in industrial engineering and food science engineering, which they acquired from graduating from the Institute of Technology of Cambodia, to establish Navita Healthy Food & Beverage Co., LTD in 2020.

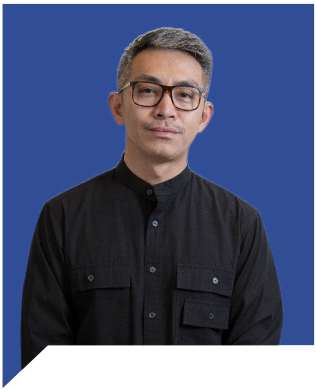
Nowadays, the Navita family enterprise has evolved into a popular local fruit processing company in Battambang province by processing fresh fruits into healthy jam and collecting local agricultural products to process into jam and canned fruit made from mangoes, pineapples, white and red dragon fruit, Tangen (logan Pailin), and tomatoes.





He was interested in mathematics and physics when he was a student, which motivated him to pursue a degree in civil engineering. After graduating as an engineer, he started working for construction companies and after gaining experience and skills in both technical and management aspects, he started his own construction business in 2016 and founded his own company called MOHANOKOR Engineering and Construction in 2019.

Mr. Suon Sampheavin was a student from a province who faced many challenges in pursuing higher education such as language skills, lack of livelihoods, and family life. However, he did not let these obstacles discourage him; he was determined and studied hard to achieve his goals. He chose this specialty because of his passion for science and also found that the construction sector had potential for significant contributions to national development. He advised students who would like to study science to focus on mathematics, physics, chemistry, and foreign languages as these subjects are important and fundamental for higher education.



Mr. **Hun Chansan**

Founder of
re:edge architecture

Architecture is an innovation that continues to evolve and change over time".
Mr. Chan San, known as a famous architect and a successful businessman, said "Have a passion. Be discipline and be consistence".

Mr. Hun Chansan began his career in a photo studio near Central Market, a commercial center in Phnom Penh. He spent a significant amount of time at the National Olympic Stadium, which boasts impressive architecture for sports and events.



H.E. Prof. **Dr. Lem Dara**

Specialist (Digestive, Surgery, and Oncology), President of the Cambodian Society of Surgery, Deputy General Director of Calmette Hospital, and Advisory Board Member of the National Council for Science, Technology, and Innovation

H.E. Prof. Dr. Lem Dara sent a message: **"The Young Bamboo Shoot Grows to become the Bamboo" is a phrase that confirms the next generation of human resources, which is a pillar in participating in country development. A good bamboo shoot must have the potential to be stronger than the previous generation and success in life is associated with a specific goal and struggle "No goal, no struggle is no success".**

His Excellency was a student who persevered through many wars since the time of the Khmer Republic (Lon Nol). Despite facing challenges such as difficulties in family life, lack of study materials, and a shortage of teachers, he never dropped out of school and successfully graduated from high school in 1986.

He was the first member of his family to attend university, while other members of his family did not graduate from high school. He had the opportunity to study both in Cambodia and abroad, in places such as Singapore and the United States, where he discovered his passion for architecture. He holds a Bachelor of Fine Arts in Architecture from Massachusetts College of Art and Design and a Master of Architecture from Northeastern University in Boston.

In 2011, Chan San established a company called Re: edge Architecture, which specializes in design that combines art, science, and technology. He and his team have worked on many well-known projects, ranging from small to large and from private housing projects to large commercial projects in Phnom Penh, Sihanoukville, Siem Reap, Kampot, and Bokor.

Chan San knows that becoming an architect is not easy; it takes a lot of time, dedication, and patience. As a student, he spent a lot of time in the studio designing, drawing, and preparing for presentations. As a professional, he faces increasing challenges and pressures; he has to manage construction projects and teamwork directly.

Due to his personal love for medicine, encouragement from his family, and at a time when the country was facing a series of civil wars and there was a shortage of doctors, he decided to study medicine to take care of his family and patients. He has become a competent doctor with high professional ethics and a good reputation in Cambodia.

He said that choosing a profession depends on one's interests, but if you would like to pursue a career as a doctor, you need to know the basics of the profession. This includes spending years studying and practicing, having perseverance and patience, not getting discouraged easily, and having little time for yourself and your family.

To prepare for this career, one must actively study basic subjects such as science, technology, mathematics, physics, biology, and foreign languages at the university level. To become a successful doctor, you must also have additional knowledge of core skills such as ethics, communication, leadership, and management.



H.E. Long Naro

Delegate of the Royal Government of Cambodia in charge as Director General of Phnom Penh Water Supply Authority

> **Everyone must have hope that it will lead to commitment and commitment will lead to success**

From a humble student to a visionary leader: How Long Naro transformed Cambodia's water sector with his STEM passion.

H.E. Long Naro is not just the director of Phnom Penh Water Supply Authority (PPWSA), he is also a role model for anyone who wants to pursue their dreams and make a difference in society. His journey from an orphan student in Pursat province to a visionary leader who oversees one of the most successful and efficient water utilities in Cambodia is inspiring and motivating.

H.E. Long Naro is an example of how STEM can transform lives and societies. He is a living proof that with STEM, anything is possible.



His Excellency Prof. Dr. CHHEM Kieth Rethy

Minister Delegate Attached to the Prime Minister; and Secretary of State of the Ministry of Industry, Science, Technology and Innovation.

> **A strong foundation of STEM education must be available at the national level. In addition, agriculture, health, and education are important pillars of human resources. A country that properly feeds its people, takes their health seriously, and creates a productive workforce is well-equipped for success.**

His Excellency Prof. Dr. CHHEM Kieth Rethy was the first Cambodian to publish more than 150 scientific research articles in international journals, publish 20 textbooks, and be invited as a speaker in more than 70 countries.

His Excellency Professor Dr. is a Medical Doctor, Science Diplomat, Professor, and Historian with additional experience in science, diplomacy, global health, nuclear technology policy, and leadership education.

Long Naro's passion for STEM (Science, Technology, Engineering, and Mathematics) started when he was a young boy who loved to learn and explore. He excelled in his studies and earned a scholarship to study mechanical engineering in Germany. He then returned to Cambodia and joined PPWSA as a technical staff in 1989, where he showed great dedication and initiative in his work. He also continued his education by obtaining a master's degree in business administration in Australia, where he learned valuable skills in management and leadership.

As the director of PPWSA since 2021, Long Naro has led the PPWSA to achieve remarkable results in reducing water losses, increasing revenues, and ensuring sustainability. He said that "Phnom Penh Water Supply Authority (PPWSA) has been able to reduce its water losses from 72% to 8.5%, by careful management and installation of modern monitoring system. This has resulted in increased revenue and sustainability for the country."

Long Naro attributes his success to his strong STEM foundation, which he believes is essential for any sector, especially the water sector, which currently requires 80% of its staff to be technical experts. He encourages young people who want to develop themselves and contribute to society to pursue STEM fields in their higher education, as these are the fields that have high demand and impact in every sector.

His Excellency Prof. Dr. CHHEM Kieth Rethy received a Master's degree and a PhD in Education, as well as a PhD in History. He worked as a Professor of Radiology in Canada (McGill University), Singapore (NUS), Austria (Vienna Medical University), and Japan (Hiroshima, Nagasaki, Fukushima Medical University) for 30 years. In addition, he was the Director of the Department of Radiology and Nuclear Medicine at the University of Western Ontario and the Director of the Human Health Division at the International Atomic Energy Agency (IAEA).

From 2014 to 2019, he was the Executive Director of the Cambodia Development Resource Institute (CDRI), which is a leading research institution in Cambodia that ranked in the top 100 of the University of Pennsylvania's Global Think Tank.

He is currently an Honorary Fellow of the Asian Vision Institute (AVI) and a member of the Board of Directors for the International Center for Higher Education Innovation (UNESCO) at Southern University of Science and Technology in Shenzhen. He is also an Honorary Professor at the Royal University of Phnom Penh (RUPP), Atomic Bomb Disease Institute, Nagasaki, Hiroshima, and Fukushima Medical University. In May 2019, he was appointed as the Minister Delegate Attached to the Prime Minister and later as the Secretary of State of the Ministry of Industry, Science, Technology & Innovation (MISTI).

STEM UNIVERSITY

In Cambodia, we have many institutions that offer STEM education. Due to the rapid growth of technology, job requirements in many new fields have also emerged that require the development of curricula that meet those needs. Thus, STEM skills have changed markedly over the last few decades, differing in the way teaching and the way students learn to use technology. More and more institutions are also developing their curriculum with a wide range of curricula and levels. But in this section, we will highlight the main institutions:

· There are 10 public institutions in Phnom Penh and 6 provinces.

· There are 8 private institutions in Phnom Penh and 2 provinces.

These institutes create STEM curricula that consider the needs of the workforce and the latest technological advances by collaborating with industry experts and researchers to ensure that the curriculum is up-to-date and relevant to the current job market.

Public Institution (Phnom Penh)

- Royal University of Phnom Penh (RUPP)
- University of Health Sciences (UHS)
- Institute of Technology of Cambodia (ITC)
- Cambodia Academy of Digital Technology (CADT)
- Preah Kossomak Polytechnic Institute (PPI)
- National Polytechnic Institute of Cambodia (NPIC)
- Institute of Electrical Science (IES)
- Health Science Institute of R.C.A.F (R.C.A.F)
- Prek Leap National Institute of Agriculture (NIA)
- Royal University of Agriculture (RUA)

Public Institution (Province)

- National University of Battambang (NUBB)
- National University of CheaSim Kamchaymear (NUCK)
- Kampong Speu Institute of Technology (KSIT)
- Kampong Cham National School of Agriculture (KCNSA)
- University of Heng Samrin Thbongkhmum (UHST)
- Svay Rieng University (SRU)

Private Institution (Phnom Penh)

- University of Puthisastra (UP)
- SETEC Institute (SETEC)
- Paññāsāstra University of Cambodia (PUC)
- Norton University (NU)
- Paragon International University (PIU)
- International University (IU)
- American University of Phnom Penh (AUPP)
- Cambodia University of Technology & Science (CAMTECH)

Private Institution (Province)

- Kirirom Institute of Technology (KIT)
- Life University (LU)

STEM UNIVERSITY

The information in this section is based on data from the guidebook for the selection of educational institutions and majors in higher education of the Ministry of Education, Youth and Sports and information from website of each university.



RUPP

Royal University of Phnom Penh

Russian Federation Boulevard, Tuek L'ak 1, Toul Kork,
Phnom Penh, Cambodia.
Tel: 023 883 640; 023 855 419
Fax: 023 880 116; 023 884 154
E-mail: secretary@rupp.edu.kh
Website: www.rupp.edu.kh
Facebook Page: www.Facebook.com/rupp.edu.kh



UHS

University of Health Science

First branch: 73 Preah Monivong Blvd, Sangkat Srah Chak,
Daun Penh District, Phnom Penh, Cambodia.
Second branch: 301 Yothapol Khemarak Phoumin Blvd (271),
Sangkat Tumnob Tuek, Phnom Penh Preah Monivong Blvd (93),
Cambodia.
Tel: 023 430 559, 093 278 899
Website: https://uhs.edu.kh/
E-mail: info@uhs.edu.kh

Faculties and majors in sciences

- Biology
- Chemistry
- Computer Science
- Environmental Science
- Mathematics
- Physics
- Food Technology & Engineering
- Data Science & Engineering
- Automation & Supply Chain System Engineering
- Environmental Engineering
- Bio-engineering /BioTechnology
- Information Technology
- Telecommunication & Electronic Engineering

Faculties and majors in sciences

- Medicine
- Dentistry
- Pharmacy
- Medical Care



ITC

Institute of Technology of Cambodia

Russian Confederation Boulevard, PO Box 86, Phnom Penh.
Tel: 023 880 370
Fax: 023 880 369
Email: info@itc.edu.kh
Website: www.itc.edu.kh



CADT

Cambodia Academy of Digital Technology

Bridge 2, National Road 6A, Prek Leap District, Chroy Changva Commune, Phnom Penh.
Facebook Page: www.facebook.com/CADT.Academy/
Website: vwww.cadt.edu.kh/

Faculties and majors in sciences

- Electronic & Automation Engineering
- Electrical & Energy Engineering
- Mechanical Engineering
- Industrial Engineering
- Information & Communication Technology
- Telecommunication & Network Engineering
- Civil Engineering
- Architectural Engineering
- Infrastructure & Transportation
- Water Resource & Rural Infrastructure
- Water Environmental Engineering
- Chemical Engineering
- Food Science & Technology
- Geotechnical Engineering
- Geo-resource & Petroleum

Faculties and majors in sciences

- Digital Governance
- Telecoms & Networking
- Computer Science
- Digital Business



RUA

Royal University of Agriculture

Dongkor District, Phnom Penh, Cambodia
Tel: 023 219 753
Fax: 023 230 559; 023 230 558
Email: info@rua.edu.kh
Website: www.rua.edu.kh
P.O.Box: 2696



NIA

Prek Leap National Institute of Agriculture

National Road No 6, Sangkat Prek Leap, Khan Chroy Changva, Phnom Penh
Tel: 023 691 0582; 092 767 880
Fax: 023 219 756
Email: inainfo@nia.edu.kh
Website: www.nia.edu.kh
Facebook Page: facebook.com/prek.leap

Faculties and majors in sciences

- Faculty of Veterinary Medicine
- Faculty of Fisheries
- Faculty of Agronomy
- Faculty of Agricultural Economics & Rural Development
- Faculty of Animal Science
- Faculty of Rubber Science
- Faculty of Forestry Science
- Faculty of Agro-Industry
- Faculty of Agricultural Engineering

Faculties and majors in sciences

- Agronomy
- Agro-Industry
- Animal Science & Veterinary Medicine
- Cadastre
- Fisheries Science
- Horticulture
- Forestry Science



IES

Institute of Electrical Science

St. 217 (Chamkar Dong), Dorng Kor District, Dorng Kor Commune, Phnom Penh
Tel: 012 292 393, 097 733 6643
Fax: 023 222 694
Email: institute.electrical.science@gmail.com, info@ies.edu.kh
Website: www.ies.edu.kh
Facebook Page: www.facebook.com/ies.edu.kh



R.C.A.F

Health Science Institute of R.C.A.F.

National Road 3, Kraing Dauntey Village, Choam Chao Quarter, Posenchey Dstrict, Phnom Penh
Tel: 023 6465 777, 097 976 2476
Email: hsi.rcaf@gmail.com
Website: https://www.hsi-rcaf.edu.kh
Facebook Page: Health Science Institute of RCAF

Faculties and majors in sciences



Electricity

Faculties and majors in sciences



Medicine



Nursery & Midwifery



Pharmacy



Nursery



Dentistry



Midwifery



NPIC

National Polytechnic Institute of Cambodia

Address: Prey Popel Village, Samraong Kraom Commune, Pou Saenchey District, Phnom Penh (Near Wat Poun Phnom)
Tel: 011 769 003, 081 733 377
Website https://npic.edu.kh/
Email: npicinfo@gmail.com



PPI

Preah Kossomak Polytechnic Institute

Address: Russian Federation Blvd, Chong Thnal khangkert Village, Tuek Thla Commune, Saensokh District, Phnom Penh
Tel: 012 826 404, 011 760 000
Email: ppi@ppiedu.com
Website: www.ppiedu.com

Faculties and majors in sciences

- Electronics & Telecommunications
- Computer Science
- Electricity Engineering
- Civil and Architecture
- General Mechanics
- Automotive Mechanics

Faculties and majors in sciences

- Faculty of Information Technology
- Faculty of Electronic
- Faculty of Electricity
- Faculty of Civil Engineering

Battambang



National University of Battambang (NUBB)

National Road No.5, Ou Khcheay Village,
Preaek Preah Sdach Commune,
Battambang City, Battambang Province

053 952 905/ 053 952 920

info@nubb.edu.kh

facebook.com/nubb.cambodia

www.nubb.edu.kh/en

Faculties and majors in science

- Animal Science
- Horticulture
- Food Processing
- Information Technology
- Civil Engineering
- Architecture
- Digital Information Study

Preyveng



Chea Sim University of Kamchaymear (CSUK)

National Road No.18, Thnal Kaeng Village,
Smaong Khang Cheung Commune,
Kamchay Mear District, Prey Veng

012 299 570/012 799 587

info@csuk.edu.kh

facebook.com/csukkc.edu

Faculties and majors in science

- Agronomy
- Natural Resource Management
- Mechanics
- Electronics
- Electricity
- Agricultural machinery
- Livestock Production & Veterinary Medicine

Kampong Speu



Kampong Speu Institute of Technology (KSIT)

National Road No. 44, O Angkum Village, Omlaing Commune, Thpong District, Kampong Speu Province.

085 483 609/ 016 55 66 18

bunheharth@hotmail.com
siek_nguon@yahoo.com

facebook.com/KsitCambodia/

www.ksit.edu.kh

Faculties and majors in science

- Crop Science
- Fisheries Science
- Animal Science
- Business Computers
- Computer Science
- Electrical Installation
- Mechanical Technology
- Food Science

Kampong Cham



Kampong Cham National School of Agriculture (KCNSA)

Village 6, Old National Road 7, Sangkat Veal Vong, Krung Kampong Cham, Kampong Cham Province.

042 943 399 / 012 884 110

sereisuon@yahoo.com
venghengva@gmail.com

Kampong Cham National School of Agriculture

Faculties and majors in science

- Agricultural Science
- Animal Science and Medicine
- Rubber Science
- Fisheries Science

Thbongkhmum



University of Heng Samrin Thbongkhmum (UHST)

Chamkar Maisak Village, Sralop Commune, Tbong Khmum District, Tbong Khmum Province.

012 734 233/012 797 879

vannaro@gmail.com
pintara30@gmail.com
uhstpintara@gmail.com

www.uhst.edu.kh

Faculties and majors in science

- Veterinarian
- Animal Science
- Agronomy
- Agricultural economy
- Civil Engineering
- Forest Science & Natural Resources
- Computer Programming
- Computer Science
- Industrial & Mechanics
- Agricultural machinery
- Business Information Technology
- Food & Chemical Engineering

Svay Rieng



Svay Rieng University (SRU)

Along National Road 1, Chambok Village, Sangkat Chek, Krung Svay Rieng, Svay Rieng Province

011 411 778 / 016 233 778

info@sru.edu.kh

www.sru.edu.kh

Faculties and majors in science

- Mathematics
- Computer Science
- Agronomy
- Rural Development
- Animal Science and Veterinary

Phnom Penh



University of Puthisastra
(**UP**)

55, Street 180-184, Sangkat Boeung Reang, Khan Daun Penh, Phnom Penh
023 221 624
info@puthisastra.edu.kh
www.puthisastra.edu.kh

Faculties and majors in science

- Faculty of Dentistry
- Faculty of Pharmacy
- Faculty of Nursing and Midwifery
- Faculty of Health Science & Biotechnology
- Faculty of Medicine

Phnom Penh



SETEC Institute
(**SETEC**)

Building No. 86A, Confederation de la Russie Blvd, Sangkat Teuk Laak I, Khan Toul Kork, Phnom Penh
023 880612/012 395 190
info@setecu.com
www.setecu.com

Faculties and majors in science

- Management Information System
- Business Information Technology
- Design
- Information Technology

Phnom Penh



Pannasastra University of Cambodia (PUC)

Street 144-184, Norodom Blvd, Sangkat Tonle Bassac, Khan Chamkarmon, Phnom Penh

011 706 610 / 087 777 944

info@puthisastra.edu.kh

www.puc.edu.kh

Faculties and majors in science

- Environmental policy & planning
- Civil Engineering
- Computer Science
- Computer Engineering
- Architecture & Interior Design

Phnom Penh



Norton University (NU)

Along Keo Chenda Street, Khan Chroy Changva, Phnom Penh

023 982 166 / 023 982 177

www.norton-u.com

www.norton-u.com

Faculties and majors in science

- Architecture
- Civil Engineering
- Medicine
- Dentistry
- Pharmacy
- Nursing
- Software Development
- Electricity and electronics
- Information & Communication Technology Management
- Computer Science
- Network Engineering & Security
- Creative & Multimedia & Web Design
- Midwifery
- Medical Lab Technology

Phnom Penh



International University (IU)

St.1011-1984, Sangkat Phnom Penh Thmey, Khan Sen Sok, Phnom Penh
023 881 623
info@iu.edu.kh
www.iu.edu.kh
facebook.com/iuinternationaluniversity

Faculties and majors in science

- Medicine
- Medical Care
- Pharmacy
- Dentistry
- Civil Engineering
- Microbiology
- Environmental Science
- Cadastral
- Information Technology
- Bio-Chemistry
- Electrical Engineering
- Bio-Technology
- Food & Chemical Engineering

Phnom Penh



Paragon International University (PIU)

No. 8, St. 315, Boeng Kak 1, Tuol Kork, Phnom Penh
023 996 111 / 017 996 111
info@paragoniu.edu.kh
Paragon International University

Faculties and majors in science

- Civil Engineering
- Architectural Engineering
- Architecture
- Construction Management
- Industrial Engineering
- Management of Information System
- Computer Science

Phnom Penh



American University of Phnom Penh (AUPP)

#278H, Street 201R, Kroalkor Village, Sangkat Kilometer 6, Khan Russey Keo , Phnom Penh

023 990 023/012 266 631

info@aupp.edu.kh

facebook.com/aupp.kh

Faculties and majors in science

- Computer Science
- Information and Communications Technology
- Cybersecurity
- Software Development
- Cloud Computing

Phnom Penh



Cambodia University of Technology and Science (CamTech)

Sangkat Prektasek, Khan Chroy Chongvar, Phnom Penh

012 833 075

info@camtech.edu.kh

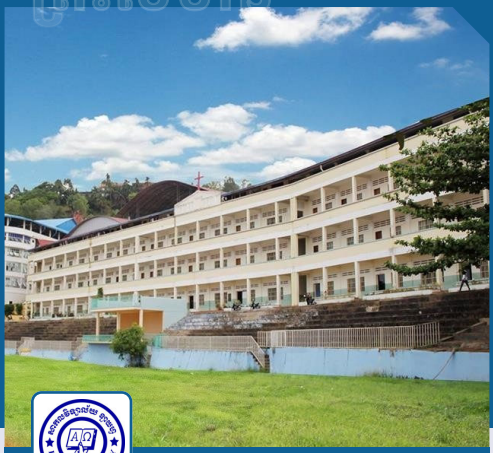
www.camtech.edu.kh

facebook.com/CamTechUniversity

Faculties and majors in science

- Cybersecurity
- Robotics & Automation Engineering
- Interior Design
- Architecture
- Software Engineering
- Computer Science and Artificial Intelligence

ព្រះសីហនុ



Life University
(**LU**)

CT Street Mondol 3, Sangkat 2, Sihanoukville, Cambodia
034 934 498 / 078 966 877
admin@lifeun.edu.kh
www.lifeun.edu.kh
Life University

Faculties and majors in science

- Architecture
- Computer Science
- Civil Engineering
- Mathematics
- Nursing
- Midwifery

ពិភក្សី



Kirirom Institute of Technology
(**KIT**)

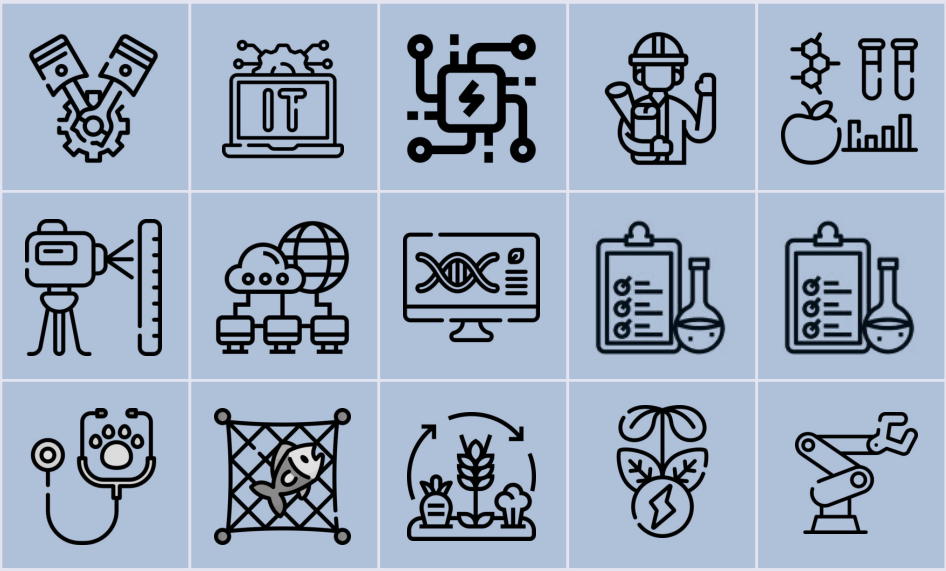
Kirirom National Park, Khum Chambak, Phnom Srouch District, Kampongspeu Province
078 777 244 / 078 777 482
contactus@kit.edu.kh
kit.edu.kh
facebook.com/KITinstitute

Faculties and majors in science

- Software Engineering
- Architecture

STEM MAJORS

STEM Majors are degree programs that provides students with the education and training they are required to serve in science, technology, engineering and innovation field. With these foundations, careers in science, technology and innovation allow students to become problem solvers, create new ideas, research and innovation. These professionals will be working in different places such as at offices, laboratories, research institutions, construction sites, factories, enterprises and more. The degree program is generally offered at the undergraduate level, but there are also master's and doctoral levels. STEM allow students to use reasoning and in-depth analysis skills to reach conclusions based on research data to solve real-life problems.



STEM MAJORS

Based on the preliminary study and data collection, the description of STEM majors in this section was derived from the integration of various university curricula.





Industrial and Mechanical Engineering

វិស្វកម្មឧស្សាហកម្ម និងមេកានិច

This major focuses on the design, development and improvement of operating system and machinery.

Engineers in this field use **mathematics**, **physics**, and **computers** to create a complete product, ranging from small to large production chains.



Information Technology

ពត៌មានវិទ្យា

This major utilizes technology to assist a person or a company in managing and transmitting data.

Experts in this field work with **computer systems**, **telecommunications networks**, **software**, and **databases**. etc.



Electronical Engineering

វិស្វកម្មអេឡិចត្រូនិច

This major involves the design, the production chain development, and the maintenance of electronic systems, spare parts, and other electronic devices.

Electrical engineers work in areas such as **telecommunications**, **medical devices**, and **electrical equipment**.



Civil Engineering

វិស្វកម្មសំណង់ស៊ីវិល

This major focuses on the design, construct, and maintenance and repair of infrastructure including roads, bridges, buildings, and water supply systems.

Civil engineers use their **mathematical**, **physical**, and scientific knowledge of the components of a unit to study and process the construction of a construction project.



Food and Chemical Engineering

វិស្វកម្មគីមី និងអាហារ

This major combine science and engineering in the study to improve the quality, safety and nutrients in food and create new products.

Food engineers are responsible for **developing new approaches to food production chain, food preservation and packaging**.



Geo-Resource & Geo-Technical Engineering

វិស្វកម្មធនធានរ៉ែ និងភូគព្ភសាស្ត្រ

This major focuses on the exploration, processing, and efficient use of natural resources such as minerals, water, and energy.

This specialty **studies and analyses the characteristics of soil and rocks** related to **buildings** and **topography** on earth.



Telecommunication & Networking

ទូរគមនាគមន៍ និងបណ្តាញ

This major focuses on the development and design of telecommunications systems, networks, and electronic equipment.

Engineers in this field work with **technologies available on mobile phones, the Internet and wireless communication systems**.



Computer Science

វិទ្យាសាស្ត្រកុំព្យូទ័រ

Computer Science major focuses on the study of computers and computer programs.

Engineers in this field design and **develop both software** and **computer components** to improve their capabilities and outputs.



Medicine

វេជ្ជសាស្ត្រ

This major focuses on the study and practice of the diagnosis, treatment and prevention of various human diseases.

Experts in this field work in **hospitals**, **clinics**, and **research institutes**.



Laboratory and Medicine

បច្ចេកទេសមន្ទីរពិសោធន៍ វេជ្ជសាស្ត្រ

Experts in this field work in the laboratory to test samples using diagnostic and therapeutic techniques.

This major covers a wide range of specialties, including **biochemistry**, **microbiology**, and **hematology**.



Animal Science and Medicine

វិទ្យាសាស្ត្រ និងវេជ្ជសាស្ត្រសត្វ

This major focuses on studying and understanding animal production and animal health.

Veterinarians **diagnose**, **treat**, and **prevent animal infections** as well as improve animal welfare.



Fisheries Science

វិទ្យាសាស្ត្រជលផល

This major focuses on the study of marine and freshwater resource management.

Experts in this field work to **maintain sustainable fisheries** and **protect aquatic ecosystems**.



Crop Science

វិទ្យាសាស្ត្រដំណាំ

This major focuses on the study of growth, development, and management of crops.

Experts in this field are responsible for improving the **food production chain** through **research and development for sustainable cultivation**.



Environmental Engineering

វិស្វកម្មបរិស្ថាន

This major focuses on environmental protection, including air, water, and soil.

Environmental engineers develop strategies to **manage waste**, **prevent emissions** and **protect natural resources**.



Robotic and Automatic Engineering

វិស្វកម្មរ៉ូបូត និងស្វ័យប្រវត្តិកម្ម

This major utilizes computers to develop and design robots as well as automation systems.

Engineers in this field work in the **industrial automation**.



គិលានុបដ្ឋាក

Nursery

Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life.

This book designed under part of the project

“Kampot Enrichment in Science, Technology & Innovation”

by General Department of Science, Technology & Innovation with financial support from the **Quick Impact Project** via the Embassy of India to the Kingdom of Cambodia.

Ministry of Industry, Science, Technology & Innovation

Embassy of India, Phnom Penh, Cambodia