

INSTITUTE OF SCIENCE AND TECHNOLOGY

CENTRAL CAMPUS OF TECHNOLOGY

BROCHURE | 2022

Bachelor Programs

B.Tech.

Food Technology

B.Sc.

Nutrition & Dietetics

B.Sc.

Biology | Physics

B.Sc. CSIT

Bachelor of Science in
Computer Science & IT

BIT

Bachelors in Information Technology

Masters Programs

M.Tech.

Food Technology

M.Sc.

Master of Science in Microbiology



www.cctdharan.edu.np



Message from Campus Chief

Associate Prof. Dr. Dil Kumar Limbu

Campus Chief
CCT, Dharan

Central Campus of Technology (CCT), an autonomous constituent campus of Tribhuvan University backed with adequate infrastructure, a dynamic team of highly qualified and experienced faculties having international exposure and a conducive teaching-learning environment, is a premier campus of Food and Nutrition education in Nepal. We continue enriching our students with intensive professional training, seminar and adaptive research so that they would be professionally capable, technically healthy, proactive and able to cope up with the challenges of modern competitive job markets. Our students have been working successfully in national and international organizations with excellent performance and dedication. We are developing relationships with national and international academic institutions, food industries and government and non-government organizations to foster academic quality. We have introduced BIT and CSIT from the academic year 2020-21.

Our determination towards quality education, developing CCT as a Centre of Excellence (COE) and creating a lively and friendly relation among the stakeholders in developing the sense of ownership will remain undeterred. We would be delighted to welcome all the students willing to pursue their future career in the field of Science and Technology.

Message from the Chairman

Prof. Pashupati Mishra

Chairman, Campus Management Committee
CCT, Dharan



Central Campus of Technology is an autonomous and constituent campus of Tribhuvan University that offers Bachelors programs in Food Technology, Nutrition and Dietetics and Basic Sciences. This campus is well equipped with adequate facilities such as laboratory, equipment and library for both teaching and research activities and supported by dynamic, highly qualified and experienced faculties determined to quality education and learning. The performance of graduates from this campus is being appreciated by various food industries and food related organizations. Many of the former graduates from the campus are now successfully studying and working in different countries abroad.

Now this campus is fortifying the Science and Technology programs by developing more facility for research and development and opening new programs in Bachelor and Master Levels. Our aims are to provide quality and relevant education to the students, develop the campus as a Centre of Excellence and create environment conducive to teaching-learning. Our ultimate goal is to develop this campus as an Institute of Food Science and Technology, and thus create University of Technology in the days to come. We expect support and cooperation from students, faculties and staffs of the campus as well as different related organizations and stakeholders outside the campus, to achieve our goal of academic quality and excellence.

Introduction



Central Campus of Technology, Dharan (CCT) established in 1972 AD, is a constituent unitary and autonomous Science & Technology campus of Tribhuvan University (TU). The campus offers various academic programs; B.Tech. (Food), B.Sc. Nutrition & Dietetics, B.Sc. & M.Sc. (Microbiology), and B.Sc. Physics, B.Sc. Geology, B.Sc. CSIT and BIT.

This is the pioneer and forerunner campus of Food Technology and Nutrition & Dietetics education in the Nepal. Central Department of Food Technology

under the IOST, TU is situated in the campus premises offering M.Tech & PhD study in Food technology.

The campus is situated at the isolated and quite hillock Hattisar (altitude of 428 meters and average temperature of 31°C) on the lap of Bijaypur hill in northeast of Dharan Sub-Metropolitan City. The campus is spanned in 14.2 hectares lush with flora & fauna and has all the amenities to meet the national and international standards. It obtained the status of decentralized campus in 1998 AD and autonomous campus in 2012 AD.

Central Campus of Technology (CCT) envisions developing the Institute as a Centre of Excellence (COE) in Food Science & Technology education in Nepal thereby transforming into a Deemed University.

Vision

Mission

The campus mission is to contribute to national development by imparting quality education, carrying adaptive research and producing competent manpower at an affordable cost.

Objectives

- ◆ Opting academic autonomy as per the TU revised autonomy rule and introduce different market oriented academic programs.
- ◆ Establish CCT as one of the finest research station in the SAARC region & foster linkage with national and international institutions.
- ◆ Build a robust management information system and enhance financial sustainability.



Organization

A board constituted according to the regulation promulgated for autonomous campus by Tribhuvan University, Nepal manages the campus. The managing board comprises of representations from campus teachers, students, staff, campus authority, guardians, local government, representatives from different spheres of life, university concerned ministry and university grants commission. The day-to-day functions of the campus are executed by a standing body called executive committee headed by the campus chief.



Academic Programs

The campus runs five Bachelors' and one Master's Programs under nine different departments. There are of about 900 students in the campus of which 48% are boys and 52% are girls. B.Sc. Nutrition & Dietetics program is run only at CCT in Nepal. The campus accepts aspirants from all over Nepal and for B.Tech. (Food), there is provision for accepting candidates from SAARC countries also.

B. TECH (FOOD)

Bachelor in Food Technology

Quota & Fee Structure

Program	Duration	Admission Scheme	Quota	Amount (NRs.)
B. Tech (Food)	4 Years	CCT Staff	1	22,000/-
		Free Competition	21	46,000/-
		Donation 1 Lakh	4	1,46,000/-
		SAARC 3 Lakhs	4	3,46,000/-
		Donation 4 Lakhs	18	4,46,000/-
				Total No. of Seats : 48

Admission Procedure and Requirements

Entrance exam for B.Tech (Food) is conducted by IOST Dean Office, TU generally after the results of +2. Applicants must be Second Division in +2 Science or I.Sc or I.Tech in Food or Lab technology or equivalent by TU and must have passed subjects like English, Mathematics, Physics and Chemistry in second division or Grade C in each subject of 100 full marks. Applicants passing 3-year diploma in Food & Dairy technology from CTEVT must have second division in each subjects. Applicants passing A-Level must have at least grade D in mathematics, physics and chemistry of 100 full marks.

The admission is based on merit list of entrance exam and student who seek admission at CCT are required to go through another round of screening protocol.

- ◆ The application form for above can be collected from the campus office or downloaded from the official site of IOST www.tuiost.edu.np
- ◆ The admission is based on entrance merit list and IOST will publish the list of successful candidates immediately after the entrance examination.
- ◆ Enrollment must be within the stipulated date; failure to take admission within stipulated date automatically will be passed on to eligible waiting list candidate.
- ◆ The successful candidate must submit his/her required documents/testimonials at the time of admission.

B.SC. ND

Bachelor of Science in Nutrition and Dietetics

Quota & Fee Structure

Program	Duration	Admission Scheme	Quota	Amount (NRs.)
B.Sc. Nutrition and Dietetics	4 Years (8 Semesters)	CCT Staff	1	38,000/-
		Free Competition	4	62,000/-
		Donation 1 Lakh	4	1,62,000/-
		Donation 3 Lakhs	16	3,62,000/-
		Donation 4 Lakhs	5	4,62,000/-

Total No. of Seats : 30

Admission Procedure and Requirements

Entrance exam for B.Sc. Nutrition & dietetics is conducted by Central Campus of Technology (CCT) generally after the results of +2. Applicants must be Second Division in +2 Science or I.Sc or I.Tech in Food or Lab technology or equivalent by TU and must have passed subjects like English, Mathematics, Physics and Chemistry in second division or Grade C in each subject of 100 full marks. Applicants passing 3-years diploma in Food & Dairy technology from CTEVT must have second division in each subjects. Applicants passing A-Level must have at least grade D in mathematics, physics and chemistry of 100 full marks.

- ◆ The application form for above can be collected from the campus office or downloaded from the official site of IOST www.tuiost.edu.np
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- ◆ Enrollment must be within the stipulated date; failure to take admission within stipulated date automatically will be passed on to eligible waiting list candidate.
- ◆ The successful candidate must submit his/her required documents/testimonials at the time of admission.



B.SC. GENERAL

Bachelor of Science in Biology/Physics

Quota & Fee Structure

Program	Duration	Admission Scheme	Quota	Amount (NRs.)
B.Sc.Biology	4 Years	Free Competition	30	56,000/-
		Donation	60	116,000/-
Total No. of Seats : 90				
B.Sc. Physics	4 Years	Free Competition	30	56,000/-
		Donation	60	116,000/-
Total No. of Seats : 90				
B.Sc. Geology	4 Years	Free Competition	20	76,000/-
		Donation	40	136,000/-
Total No. of Seats :60				

Note: In each elective subject at least 10 students must be enrolled in the fourth year. NRs. 10,000/- must be paid for the thesis students.

Admission Procedure and Requirements

Entrance exam for B.Sc. Biology is conducted by IOST Dean Office, TU generally after the results of +2. Applicants must be passed in +2 Science or I.Sc, A-Level or equivalent by TU and must have passed subjects like English, Biology, Physics and Chemistry passed or Grade C in each subject of 200 full marks. For the applicants passing A-Level must have at least grade E.

Entrance exam for B.Sc. Physics is conducted by IOST Dean Office, TU generally after the results of +2. Applicants must be passed in +2 Science or I.Sc, A-Level or equivalent by TU and must have passed subjects like English, Mathematics, Physics and Chemistry passed or Grade C in each subject of 200 full marks. For the applicants passing A-Level must have at least grade E.

The admission is based on merit list of entrance exam and students who seek admission at CCT are required to go through another round of screening protocol.

- ◆ The application form for above can be collected from the campus office or downloaded from the official site of IOST www.tuiost.edu.np
- ◆ The admission is based on entrance merit list and IOST will publish the list of successful candidates immediately after the entrance examination.
- ◆ Enrollment must be within the stipulated date; failure to take admission within stipulated date automatically will be passed on to eligible waiting list candidate.
- ◆ The successful candidate must submit his/her required documents/testimonials at the time of admission.

B.SC. CSIT

Bachelor of Science in Computer Science & IT

Quota & Fee Structure

Program	Duration	Admission Scheme	Quota	Amount (NRs.)
B.Sc. CSIT	4 Years (8 Semesters)	Free Competition	6	50,500/-
		Donation	30	425,500/-
				Total No. of Seats : 36

Admission Procedure and Requirements

Entrance exam for B.Sc. CSIT is conducted by IOST Dean Office, TU generally after the results of +2. Applicants must be passed in +2 Science or I.Sc, A-Level or equivalent by TU and must have passed subjects like English, Mathematics, Physics and Chemistry passed or Grade C in each subject of 200 full marks. For the applicants passing A-Level must have at least grade E.

The admission is based on merit list of entrance exam and students who seek admission at CCT are required to go through another round of screening protocol.

- ◆ The application form for above can be collected from the campus office or downloaded from the official site of IOST www.tuiost.edu.np
- ◆ The selection is based on entrance merit list and the IOST will publish the list of successful candidates immediately after the entrance examination.
- ◆ Enrollment must be within the stipulated date; failure to take admission within stipulated date automatically will be passed on to eligible waiting list candidate.
- ◆ The successful candidate must submit his/her required documents/testimonials at the time of admission.



BIT

Bachelor of Information Technology

Quota & Fee Structure

Program	Duration	Admission Scheme	Quota	Amount (NRs.)
BIT	4 Years (8 Semesters)	Free Competition	5	50,500/-
		Donation	31	330,500/-
				Total No. of Seats : 36

Admission Procedure and Requirements

Entrance exam for BIT is conducted by IOST Dean Office, TU generally after the results of +2. Applicants must be passed in +2 Science or I.Sc, A-Level or equivalent by TU.

The admission is based on merit list of entrance exam and students who seek admission at CCT are required to go through another round of screening protocol.

- ◆ The application form for above can be collected from the campus office or downloaded from the official site of IOST www.tuiost.edu.np
- ◆ The selection is based on entrance merit list and the IOST will publish the list of successful candidates immediately after the entrance examination.
- ◆ Enrollment must be within the stipulated date; failure to take admission within stipulated date automatically will be passed on to eligible waiting list candidate.
- ◆ The successful candidate must submit his/her required documents/testimonials at the time of admission.

Success Story

After SLC, I joined Central Campus of Technology (CCT) in 2051 BS to pursue I.Sc. (Biology) and had graduated B.Sc. Microbiology in 2057 BS. I had completed my Post-Graduation from Central Department of Microbiology (TU). I started my professional career in Department of Microbiology, at B. P. Koirala Institute of Health Sciences (BPKIHS), Dharan, Nepal in 2004 AD. BPKIHS had given me an opportunity to upgrade my academic through PhD in Biomedical Sciences at University of Antwerp, Antwerp, Belgium. I was involved to develop and apply the molecular tools to understand the paradigm of *Leishmania donovani* infection, the causative agent for Kala-azar - the disease of the poorest of the poor segment of the community in the world. I am working as an Additional Professor and Head of the Department of Microbiology.

I believe that continuous efforts to learn sciences would provide an opportunity to understand deeper perspectives of sciences. Indeed, CCT was the foremost platform to strengthen the horizon of my critical thoughts. During my education in this campus, I had advanced my brain to criticize the dogma; which ofcourse requires to interact the phenomenon of sciences.



Dr Narayan Raj Bhattarai
Additional Professor & Head
Department of Microbiology
B. P. Koirala Institute of Health
Sciences, Dharan, Nepal

M.TECH. (FOOD)

Master in Food Technology

Quota & Fee Structure

Program	Duration	Admission Scheme	Quota	Amount (NRs.)
M.Tech. (Food)	2 Years	Free Competition	1	50% off on Tution Fee, Lab, Donation
		Donation	24	300,000/-
				Total No. of Seats : 25

Admission Procedure and Requirements

Entrance exam for M.Tech. (Food) is conducted by IOST, Dean office, TU generally after the result of B.Tech (Food). Applicants must secure 50% Marks in B. Tech. (Food) from TU or TU recognized Universities

- ◆ The application form can be collected from the campus office or downloaded from the official site of IOST www.tuiost.edu.np
- ◆ The admission is based on entrance merit list and the IOST will publish the list of successful candidates immediately after the entrance examination.
- ◆ Enrollment must be within the stipulated date; failure to take admission within stipulated date automatically will be passed on to eligible waiting list candidate.
- ◆ The successful candidate must submit his/her required documents/testimonials at the time of admission.
- ◆ Students who have passed B.Sc. Physics / Chemistry and completed 6 months Bridge Course of M.Tech. (Food) can also apply for the program.

Success Story

I completed my B. Tech (Food) from Central Campus of Technology, Dharan in 2003 and then worked for 4+ years in food industries (Chaudhary Group Nawalparasi and Bottlers Nepal Kathmandu) before I started my Master's Degree in Food Sciences at one of the top universities in the world, University of Helsinki. My interest in the research grew further from my Hattisar days, which drove me to pursue a PhD. In 2016, I was awarded a PhD degree in Food Sciences (Food Chemistry) with the highest doctoral dissertation grade (Pass with Distinction). Since my PhD days, my research focuses on B vitamins particularly the natural fortification of vitamin B12 in plant-based foods which is the only vitamin completely lacking in plant foods.

Apart from my good experiences while working in the food industry, I enjoy very much basic and applied research. So far, I have authored some 20+ papers in prestigious journals in developing modern analytical methods for B vitamins and studying mechanisms of microbial biosynthesis of vitamin B12. I without a doubt say the high-quality education and learning provided at CCT is behind whatever success I have achieved in my life. I am indebted to all my teachers and support staff at CCT.



Bhawani Chamlagain, PhD
Postdoctoral researcher,
University of Helsinki, Finland
CCT B. Tech 2056 Batch

Physical Facilities

Central Campus of Technology has physical facilities adequate for administration, teaching, research, staff accommodation, sports and social functions.



The Administrative Building

Administrative Building at CCT provides adequate space for the office of campus authorities and other administrative staffs.



Classroom Building

There are two academic blocks in the campus providing sufficient space to run all the programs.



Laboratory

There are altogether 15 laboratories in the campus which are distributed program-wise and subject-wise. Some laboratories are multipurpose and others are subject-specific. All laboratories are adequately equipped to conduct analytical works covered by

prescribed practical courses. The laboratory facilities include Gel-doc System, PCR, Elisa, Double beam UV-Vis Spectrophotometer, Binoculars and Trinocular Olympus Microscope, Computer controlled Drier, Bioreactors, Temperature and RH Controlled Cabinet, Vacuum Evaporator, Gel-Electrophoresis, etc.

Pilot Plant

Campus has pilot plants for training of students in food processing. There are two general types of pilot plants where wet type e.g. for fruits and vegetables processing, chocolate and candy making, wine preparation and general cooking processing; and dry type e.g. grain milling, pressing of oil seeds, baking, noodle making, dehydration. Beside these, there are special pilot plants for milk processing, slaughtering, meat processing and unit operations.

Library Facilities



The campus has a well-furnished and spacious library with adequate study materials for the academic programs. It has accession of about 20,000 books, thesis and journals. It also has a well-facilitated electronic library where students can easily access 1000s of study materials.



Computer Lab

The campus has a well-equipped computer lab with modern facilities with ICT. Lab works are carried by the students from B.Sc. CSIT and BIT.



Hostel

The campus has a modest boys' hostel called 'Mahananda Sapkota Hostel', for students coming from remote places. It consists of 2-blocks, each for B.Tech. and B.Sc. students. The B.Tech. block consists of 13 rooms and the B.Sc. block consists of 11 rooms. The hostel can accommodate 57 students in all. The hostel compound is quite spacious, with sufficient space for recreation and gardening. A separate room is available for television and cable rent is managed by the students themselves. The campus has also provided internet facilities for the students. A new Boys Hostel is under construction which will be in operation very soon.

Hostel Management Committee comprising Hostel Warden, Campus Chief, Teacher Representative and a Representative from Student Union is the administrative body for Hostel Management. Hostel Prefects have duty for internal supervision and monitoring of everyday hostel activities and are responsible to Hostel Warden.



Sports and ECA Facilities

The campus has facilities for both outdoor and indoor games. It has a spacious playground for outdoor games like football, Cricket and Volleyball. There is a separate Basketball ground with Praphet. In addition to these, there is space for playing Badminton and Table-tennis.

All the sports materials are provided by the campus. Campus organizes the annual games. Besides, student union and various student organizations also organize different tournaments. Occasionally, friendly matches are organized for teachers, staff and students. Other extra-curricular activities include essay competition, quiz contest and colloquiums. All



these activities are taken care by Student Welfare Department.

Assembly Hall

The classroom building has an assembly hall that can accommodate 200 people. It has been put to a multitude of uses since its construction. Seminars/ Documentary Shows/Training Programs, Different



Ceremonies, and even Exams are regularly carried out in this hall.

Canteen

There is a Canteen in the campus premises. You can buy meals, snacks, cold drinks and tea at subsidised prices fixed through agreement with the campus. Selling of addictive items like tobacco, cigarettes and alcoholic beverages is strictly prohibited.

Teachers/Staff Quarters



There are 11 teachers' quarter for accomodating 17 families, a guest house, and a 2-storey staff quarter for 4 families.

Museum

The campus museum is rare collection of unique specimens representing man, animal and plant collected from Dharan and its surrounding. The visitors find them amazing and amusing. Some specimen are quite brain-teasers. More than seven thousand visitors visit the museum each year. Most visitors are high school and plus two school students



from Dharan and nearby districts. Realising the interest of people, the campus has initiated some upgrading works for the museum.

Saraswati Temple

There is a small Saraswati temple (the goddess of



knowledge) in the campus premises. Saraswati Puja is observed every year with enthusiastic participation of all teachers, students and staffs of the campus.

Transporation Facilities

The campus has two vehicles, a 30 seated bus and a 9 seated jeep, for transportation. The bus is used for education tours and the jeep is mostly used for official purposes. Every year around 20 educational tours are conducted.

Drinking Water Supply

The campus has a water treatment plant which has capacity of 3000 litres of potable drinking water per hour sufficient for campus family.

Power Backup

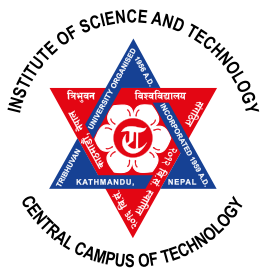
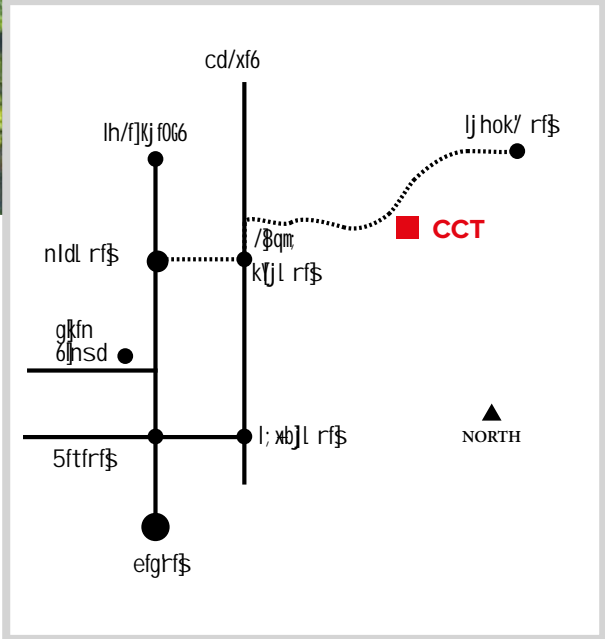
Realising the chronic shortage and irregularity of electrical power supply, the campus is planning to install a 22 KVA diesel plant which will ensure uninterrupted power supply to the campus. A small capacity diesel power generator is already in operation. The campus has already installed hybrid solar panels for office work, Research Management Cell (RMC), Library and Laboratories that will supply electricity enough to operate equipment and computers.



Central Campus of Technology has a team of highly resourceful faculties. At present, the campus has 65 faculty members and 53 administrative staffs. Teaching faculties comprise of Professor (3), Doctors (5), Readers (8), Lecturers (19) and others.

Administrative Position	Name	Contact No.
Campus Chief	Assoc. Prof. Dr. Dil K. Limbu	9852056782
Assistant Campus Chief (Academic)	Assoc. Prof. Babita Adhikari	9842054169
Assistant Campus Chief (Admin)	Lect. Hemanta Khanal	9842251500
Student Welfare	Lect. Arjun Ghimire	9804013668
Personal Administrator	Mr. Nabin Shrestha	9842020243
General Administrator	Mr. Mahesh Koirala	9842452396
Fiscal Administrator	Mr. Suresh Subedi	9842081214
Examination Officer	Mr. Hiramani Basnet	9842077589
Store Officer	Mr. Sunil Shrestha	9842025273
Library officer	Mr. Omnath Khatiwada	9841055957

Name of the Departments	Head of the Department	Contact
Food Technology	Prof. Basanta K. Rai	9862072561
Food Quality Control	Lect. Navin Gautam	9852063758
Nutrition & Dietetics	Lect. Kabindra Bhattarai	9842456671
Physics	Assoc. Prof. Sunil Kumar Bhagat	9816372727
Chemistry	Lect. Lalita Shrestha	9842104709
Biology	Lect. Sanju Parajuli	9842048307
Microbiology	Teaching Asst. Dhiren Subba Limbu	9862124836
Compulsory Subjects	Lect. Roma Ghimire	9849296922
Geology	Teaching Asst. Drona Adhikari	9841464464
M.Sc. Micro (Coordinator)	Lect. Om Prakash Panta	9841322660
CSIT / BIT Program Incharge	Lect. Balabhadra Bhandari	9842060518
Nepal Teachers' Association (TU)	Lect. Ganesh Tamang (President)	9842025777
Nepal Employee Association (TU)	Mr. Tanka Bahadur Karki (President)	9842166362
CCT Free Student Union	Mr. Saurav Sanjel	9842175645



INSTITUTE OF SCIENCE AND TECHNOLOGY

CENTRAL CAMPUS OF TECHNOLOGY

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