

Government of Nepal
Ministry Of Land Management, Cooperatives and Poverty Alleviation

Land Management Training Centre Dhulikhel, Kavre





About US



Land and Management Training Center (LMTC), under the Ministry of Land Management, Cooperatives and Poverty Alleviation, Government of Nepal was established in 1968 A.D. LMTC is the oldest and the only governmental institution continually and significantly producing human resources and enhancing the capacity of government personnel in the field of Surveying, Mapping, and Land Management since its establishment. The center has already produced more than 10,000 land professionals at different levels through various types of training courses.

LMTC is certified with ISO 9001:2015 for Quality Management on 29 June 2022 A.D. The center has been conducting a wide range of long and short-term training incorporating state-of-the-art modern technologies. Along with this, LMTC has collaborated to run academic courses with Kathmandu University (KU). Additionally, the Center contributes to the capacity building of Provincial and Local Governments.





Center of Excellence in Land Management and Geomatics Education





Building and Enhancing Individual and Institutional Capacity in Land Management and Geomatics





To produce qualified and skilled human resources in the field of Land Management and Geomatics



In order to achieve the abovementioned vision, mission and goal, the following objectives have been devised:

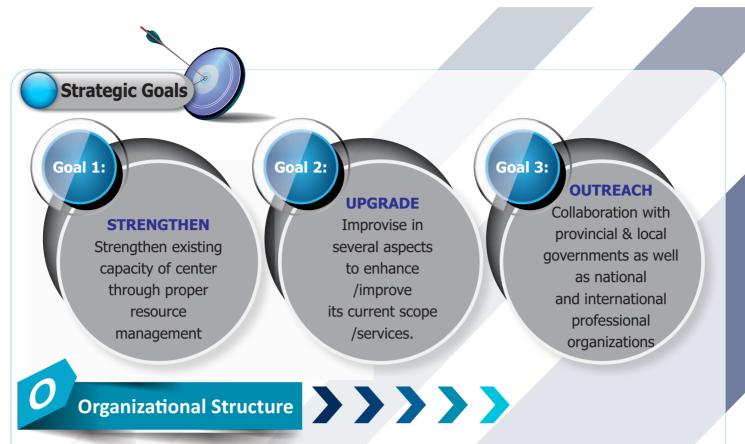
To conduct different levels of professional courses

To carry out Pre-service and In-service Training, Refresher courses and Orientation programs.

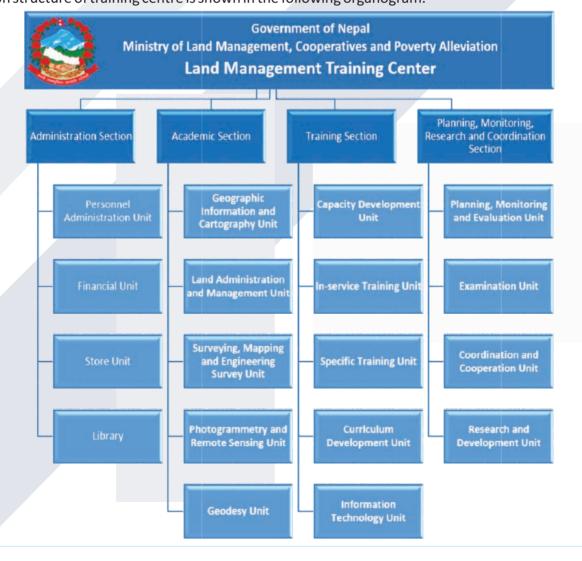
To collaborate with national and international academia and professional organizations

To promote Research and Development

To support provincial and local governments in developing qualified human resources.



Land Management training Centre is the department level organization under Ministry of Land Management, Cooperatives and Poverty Alleviation lead by Executive Director (Gazetted First Class Officer). It comprises four different section headed by four respective Director. Each section has several units assigned with different tasks and responsibilities. Centre has a dedicated team 57 staffs including permanent and on contract. Organization structure of training centre is shown in the following organogram.





- The only governmental institution continually producing human resources and enhancing the individual and institutional capacity in the field of Surveying, Mapping, and Land Management since more than 5 decades
- More than 10,000 human resources are produced
- ISO 9001:2015 Certified Institution
- Academic member of International Federation of Surveyor (FIG)







- Highly qualified instructors graduated from renowned national and international universities
- Dedicated and capable workforce
- Availability of sufficient physical infrastructure
- Adequate surveying equipment fromtraditional to state-of-art technologies

- Furnished Library and lab facilities
- 0 Peaceful and motivating environment
- Equipped with calibration lab
- Intensive fieldworks with closed Survey camp
- Collaboration with various Universities for academic degrees
- Competent and proficient products contributing outstandingly in wide range of national and international institutions











Collaboration with Academic Institutions



LMTC has been collaborating with academic institutions in order to produce academic human resource in the field of Geomatics and Land Administration from Bachelor degree to PhD. Since 2007 A.D it has been collaborating with Kathmandu University. Further, it has also been collaborating with other academic institutions as well.

Bachelor in Geomatics Engineering

Duration: 4 Years Collaborator: KU Started since 2007

ME/MS in Geoinformatics

Duration: 2 Years Collaborator: KU Started since 2019

Masters in Land Administration

Duration: 2 Years Collaborator: KU Started since 2013

PhD Program in Geoinformatics and Land Management

Duration: 4 Years (Minimum)

Collaborator: KU Started since: 2022



Long-Term Training



Long Term Trainings are designed to gain the in-depth knowledge of surveying, mapping, geo-information, and land administration. The center basically conducts twotypes of long term training courses, Senior Survey Training and Junior Survey Training. These trainings are of 1-year duration for producing the skilled manpower in the sector of Surveying and Mapping, Geo-information, and Land Administration.

Senior Survey Training
For In-service candidates

Junior Survey Training
For In-service and Fresh
candidates



Senior Survey Training

Senior Survey Training is conducted for in-service candidates for one-year duration with maximum of 24 trainees in each batch to produce senior surveyors and to enhance their professional knowledge. The courses are delivered by providing theoretical lectures supported by tutorials and assignments, indoor practical sessions, outdoor practical sessions including field camp of 2-3 months, study visits to contextualize learning, demonstrations for hands on understanding and final independent project for culminating overall learning throughout the course.

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Outcomes

The candidate will be acquainted with adequate theoretical as well as practical knowledge in the field of spatial data acquisition, processing, analysis, and dissemination techniques and technologies.

> The candidate will gain a comprehensive understanding of land administration and geo-information management, enabling to thrive in a digital landscape.

The candidates will be competent in delivering services in a digital environment using modern technologies.







Course Structure



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S.N.	Course Structure (14 Modules)			
1	Module I: Administration and General Awareness			
2	Module II: Fundamentals of Surveying and Mapping	3 Weeks		
3	Module III: Applied Mathematics and Physics	3 Weeks		
4	Module IV: Elementary Geodesy & Geodetic Positioning	2 Weeks		
5	Module V: Astronomy and Satellite Geodesy	3 Weeks		
6	Module VI: Geographic Information System and Cartography	4.5 Weeks		
7	Module VII: Photogrammetry	3 Weeks		
8	Module VIII: Remote Sensing	3 Weeks		
9	Module IX: Cadastral Survey and Land Administration	4 Weeks		
10	Module X: Topographical and Engineering Survey	3 Weeks		
11	Module XI: Field Survey I (Geodetic Survey Methods)	25 days		
12	Module XII: Field Survey II (Topographical and cadastral survey)	25 days		
13	Module XIII: Field Survey III (Engineering Survey)	25 days		
14	Module XIV: Final Independent Project	30 days		





Junior Survey Training (In-Service)

Junior Survey Training (In-service) is conducted for government employees (non-gazetted) under engineering service, survey group or equivalent for one-year duration with maximum of 24 trainees in each batch to enhance their knowledge and skills. The courses are delivered by providing theoretical lectures supported by tutorials and assignments, indoor practical sessions, outdoor practical sessions including field camp of 2-3 months, study visits to contextualize learning, demonstrations for hands on understanding and final independent project for culminating overall learning throughout the course.



Target Group

Government employees (Non-Gazetted) under Engineering Service,

Survey Group

or Equivalent

Outcomes

The candidate will be acquaintedwith theoretical as well as practical knowledge in the field of spatial data acquisition, processing, analysis, and dissemination techniques and technologies.

Outcomes

The candidate will gain a clear understandingon land administration and geo-information management, enabling to thrive in a digital landscape.

The candidates will be competent

Outcomes

in delivering services in digital environment as well.

Course Structure



S.N.	Course Structure (14 Modules)			
1	Module I: Public Administration and Organizational Management	3 Weeks		
2	Module II: Fundamental of Surveying and Geoinformation Technology			
3	Module III: Applied Mathematics and Physics	3 Weeks		
4	Module IV: Basic computer and Computer Aided Drafting	3 Weeks		
5	Module V: Geodetic Control Survey	3 Weeks		
6	Module VI: Geographic Information System and Cartography	4 Weeks		
7	Module VII: Photogrammetry and Remote Sensing	4 Weeks		
8	Module VIII: Cadastral Survey	3 Weeks		
9	Module IX: Land Administration	3 Weeks		
10	Module X: Engineering and Topographical Survey	3 Weeks		
11	Module XI: Field Survey I (Geodetic Survey Methods)	25 Days		
12	Module XII: Field Survey II (Topographical and cadastral survey)	25 Days		
13	Module XIII: Field Survey III (Engineering Survey)	25 Days		
14	Module XIV: Independent Project	30 Days		

Junior Survey Training (Fresh)

Junior Survey Training (Fresh) is conducted for the students who have completed their 10+2 education with a background in science (with Physics and Mathematics) or I. Sc. (with physics and Mathematics) for oneyear duration with a maximum of 24 trainees in each batch to produce surveyor. The courses are delivered by providing theoretical lectures supported by tutorials and assignments, indoor practical sessions, outdoor practical sessions including field camp of 2-3 months, study visits to contextualize learning, demonstrations for hands on understanding and final independent project for culminating overall learning throughout the course.







Outcomes

The successful candidates will be intermediate-level human resources in the surveying, mapping, and the land administration sector.

The candidate will be acquainted with adequate theoretical as well as practical knowledge in the field of spatial data acquisition, processing, analysis, and dissemination techniques and technologies.

The successful candidates shall have adequate knowledge in spatial data acquisition and handling, land administration and other geoinformation disciplines

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The successful candidates shall be qualified for conducting the service delivery on digital environment using recently developed technologies.

C Course Structure



S.N.	Course Structure (14 Modules)	Duration
1	Module I: Public Administration and Organizational Management	3 Weeks
2	Module II: Field Survey I (Survey Instruments and Concept)	3 Weeks
3	Module III: Fundamentals of Surveying and mapping	3 Weeks
4	Module IV: Applied Mathematics, Physics and Computer Application	3 Weeks
5	Module V: Geodetic Control Survey	3 Weeks
6	Module VI: Geographic Information System and Cartography	4 Weeks
7	Module VII: Photogrammetry and Remote Sensing	4 Weeks
8	Module VIII: Cadastral Survey	3 Weeks
9	Module IX: Land Administration	3 Weeks
10	Module X: Engineering and Topographical Survey	3 Weeks
11	Module XI: Field Survey II (Geodetic Survey Methods)	25 days
12	Module XII: Field Survey II (Topographical and cadastral survey)	25 days
13	Module XIII: Field Survey III (Engineering Survey)	25 days
14	Module XIV: Final Independent Project	30 Days

Short Term Training

Land Management Training Center has been conducting short term training to meet specific needs in the field of geo-information science and land administration. Short term training courses are focused on the specific subject matter and are generally of 2 to 5 weeks' span. Short term training provided by the center has been clustered and shown in the following table with target group and objectives.



S Overview of Short Term Training

S.N.	Courses	Duration	Target Group and Institution	Objectives
1.	Geographic Information System (GIS) Training: Basic, Advanced and Web	15 Days	Employees from Government and Public Sector with sound Knowledge of GIS and basic programming.	 Understand geographic phenomena and GIS components. Acquire profound knowledge and understanding of advanced concepts and techniques used in modeling geographic phenomena. Understand web services and web maps and visualize map in web platform
2.	Remote Sensing Training (RS): Basic, Advanced	15 Days	Employees from Government and Public Sector	 Gain hands-on skills in spatial data management and analysis. Process remote sensing image and produce map and other outputs
3.	GNSS And UAV Training	2 Weeks	Employees from Government and Public sector	 Learn about the Nepalese coordinate system and datum transformation. Apply GNSS and UAV in mapping Process UAV image and produce map and other outputs.
4.	Digital Cadastral Survey and Offce Management Training	2 weeks to 30 Working Days	Permanent employees of Nepal Government in Nepal Engineering Service Survey Group working in position of Non-gazetted first or second class or equivalent.	 Acquire basic knowledge on Cadastral survey, GIS and Database Management System. Deliver cadastral services effectively in digital environment using SAEx or NeLIS application. Acquire knowledge for effective office management and support good governance.

S.N.	Courses	Duration	Target Group and Institution	Objectives
5.	Professional Course on Geomatics and Land Administration	30 Working days	Gazetted officer of Government of Nepal Engineering service, Survey group having permanent service of at least two years.	 Acquire managerial skills for office management. Develop knowledge to conduct daily office works using digital technology. Get familiar with current cadastral and land administration system with legal knowledge of
6.	Pre-Service: Orientation Training for Newly Recruited Survey Officers, Orientation Training on Land Administration and Management (Officer Level)	1 week to 3 Months	Newly recruited Revenue and Survey Officers (Gazette Class III Level)	 Get acquainted with basic management skills, and the skills of professional and personal development. Translate their academic knowledge in to the real professional practice Acquire knowledge on various aspect of land administration system of Nepal.
7.	Instrument Handling Training	2 Weeks	Local level, non-Gazette fresh employees of Survey Department and Court's Amins/Surveyors	 Conduct digital cadastral survey using total station. Plot the acquired data into GIS software and necessary processing. Achieve the knowledge in field demarcation
8.	Training on land Administration/land management	2 days to 2 Weeks	Newly recruited (Amin/Surveyor/survey officer) of local level, High level officials working in the field of Land Administration for Non-Gazettedofficials working in Land Revenue Offices.	 Acquire theoretical as well as practical knowledge on land use and land administration. Get updated with the relevant issues of land administration and management to be addressed by the Ministry of Land Management, Cooperatives and Poverty Alleviation and Departments
9.	Open-Source Software- QGIS Training	2 Weeks	Employee of Government of Nepal, having basic computer skill and basic knowledge of Surveying and Mapping.	 Understand open-source software and their importance. Acquire basic knowledge on GIS using QGIS. Analyze spatial data for the purpose of planning and decision making.
10.	Training on Informal Land Tenure	3 Days - 2 Weeks	Members of National Land Commission, District Committee, Survey Officer, Surveyor and Assistant Surveyor	 Acquire basic information about the Commission's objectives and procedures as well as land and land use laws. Mapping informal land relations using latest technology.
11. / X	Orientation Training for Honorable Judges	3 Days	Judges in different district courts of Nepal	 Understand basicknowledge on Surveying and Mapping. Deliver knowledge on Cadastral Survey and Map Reading. Discuss on procedure of Land Administration in Nepal
12.	Training on Land Use/land Management for Local Level	2 Days-1 Week	Mayor, Deputy Mayor or Vice-chairperson, Ward Chair-persons of Local Level, Officer level or equivalent working in the field of land NGO	 Shareknowledge on legal provision and aspects of land use planning for local level. Produce human resource who can provide training on land use area classification and land use planning at the local level.





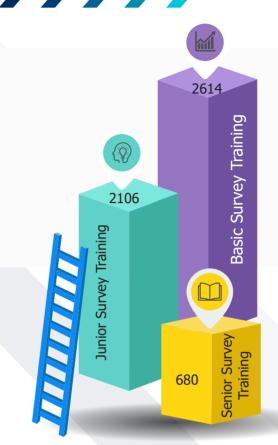
What have we achieved so far?

Land Management Training Center has been continuously and significantly producing human resources in the field of Surveying and Mapping, Land Management and Geoinformation. More than 10,000 human resources have already been

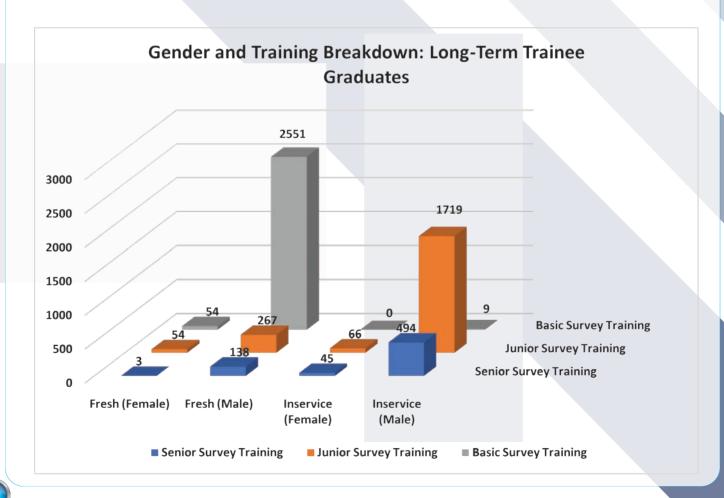
Land Management Training Centre has been collaborating with Kathmandu University to run academic degrees since 2007 A.D. More than 360 students have been provided scholarship to study in Bachelors in Geomatics Engineering. In addition, government official under Engineering service, survey group are being provided scholarship for Masters of Land Administration and ME/MS in Geoinformatics since 2013 A.D and 2019 A.D respectively.

trained or graduated through a wide range of long

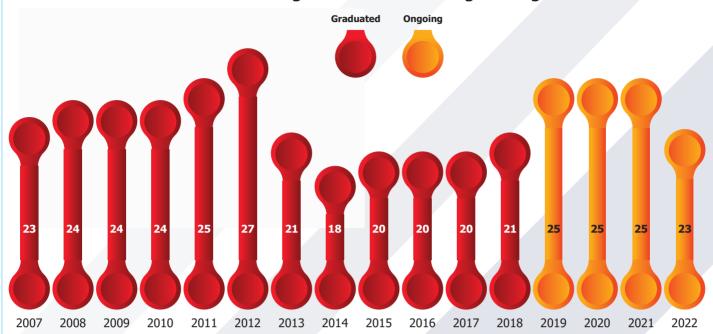
and short term training comprising fresh and in service candidates by the end of fiscal of 2079/80.



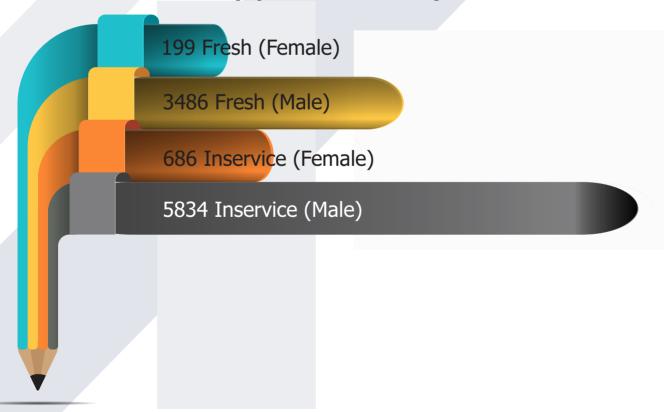
Cumulative Long-Term Training Graduates



Total Yearly Scholarship Recipients: Bachelor Degree In Geomatics Engineering

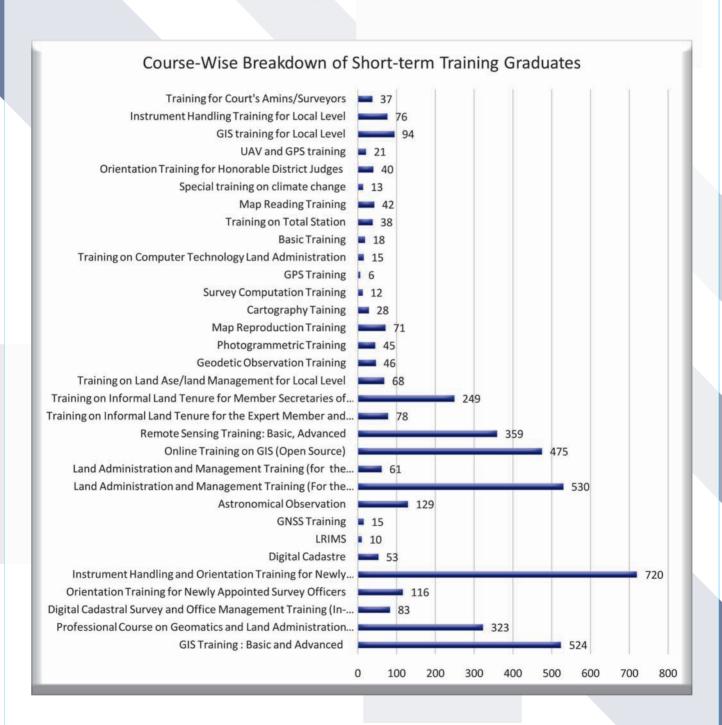


An Overview of Total Graduates by Intake and Gender" (Upto F.Y. 2079/80)



Spectrum of Short Term Trainings conducted by the Centre

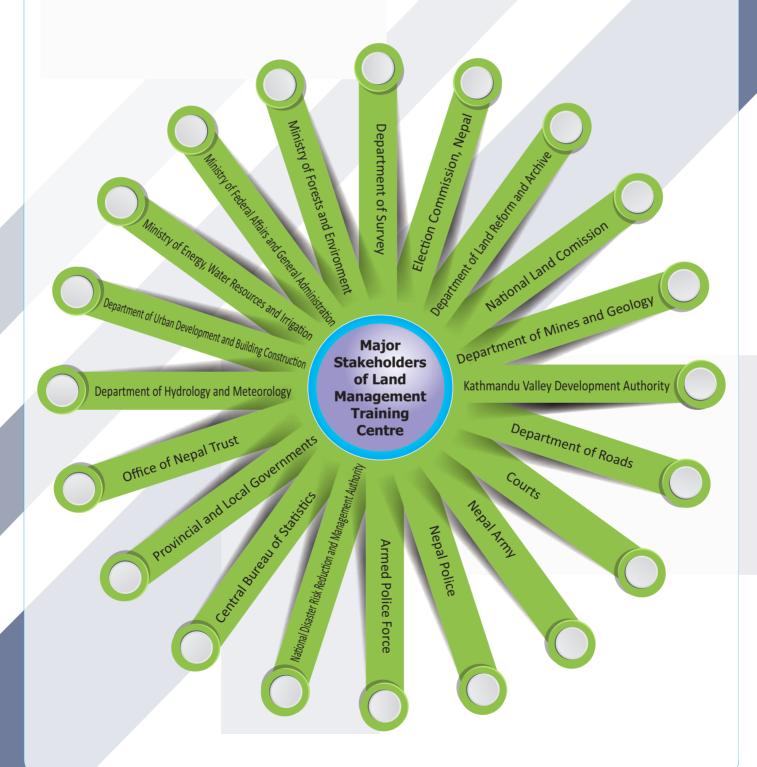






Major Stakeholders

Land Management training centre has been providing different types and levels of training for capacity buliding and professional development to the officials of several government institutions in the field of Geoinformation and land management. The major stakeholders organizations are depicted in the figure



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Career Opportunities



The successful graduates from the long term training of land management training centre and from the collaborative programs of Universities have a wide range of career opportunities within and outside the country both in government, non-government and private sectors. They are exhibiting the excellent professional performance in the national and international organizations.

Federal Government

Ministry of Land Management,
Cooperatives and Poverty Alleviation,
Department of Mines and Geology,
Department of Forest,
Department of Urban Development
and Building Construction
Nepal Army,
Nepal Police,
Armed Police Force

Provincial & Local Government

> National and International Universities

> > Non-Governmental Organizations

Private Companies (National & International)

Consulting Firms
Construction Companies
Engineering Consultancies
Hydropower Companies etc.





Library Service

Library service offers arange of resources, facilities, and assistance provided by libraries to meet the informational, educational, and recreational needs of their users.



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Transportation

LMTC provides convenient and reliable transportation options, including shuttle services and parking facilities, ensuring easy and hassle-free commuting for students, faculty, and staff, promoting accessibility and enhancing campus mobility.



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Field Visit

Field visit for the students is the way to explore their theoretical knowledge in the real field. This visit provides an opportunity for students to connect theoretical knowledge with real-world applications, fostering a deeper understanding of the subjects they study. Students get to witness concepts in action, engage with experts in the field, and develop a more hands-on and experiential approach to learning. Additionally, field visits encourage teamwork, curiosity, and critical thinking as students navigate new environments and encounter unexpected challenges.



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Sports

Sport facilities provide a diverse range of opportunities for physical fitness, team sports, and recreational activities to support a well-rounded college experience. Engaging in sports also hones time management skills, as student-athletes navigate the demands of both rigorous academic schedules and dedicated training regimens.







Hostel

Hostel facilities are designed to provide a better living environment for individuals undergoing various training programs. This facility aims to create a supportive and focused atmosphere for trainees to maximize their learning experience. Training center hostels may also offer amenities like mess or cafeteria services for meals and internet access to cater to the diverse needs of trainees. The presence of study rooms and quiet spaces allows individuals to concentrate on their course work, enhancing the overall educational environment.







Canteen

LMTC provides hygienic and nutritious food at an affordable price.







Lab

LMTC has furnished computer lab as well as calibration lab. Calibration lab is equipped with necessary equipment to calibrate the axis of the surveying instrument. Computer lab comprises sufficient number of computers with necessary software used in surveying and mapping.





LMTC has its own annual publication on land management and Geoinformation with the name "Journal on Land Management and Geoinformatics Education" and five volumes of journal have already been published comprising a wide range of research related articles on different domain of

geoinformation and land management.









Future Plans

Centre has envisioned to be the center of excellence in Geomatics and Land Management Education with the upcoming plans to persistently building and enhancing individual and institutional capacity building and a vivacious contribution in policy research in the sector of Land Management and Geomatics along with the national and international collaboration for professional growth and development.

To contribute to Policy Research in the sector of Land Management and Geomatics.

To extend collaboration with academia and regional training institutions

To contribute to capacity building in three tiers of Government in the sector of Land Management and Geomatics.





Orientation program on land administration for honorable judges



GIS Training for officials of Local Level



Refresher Program for higher officials of Ministry of land management, cooperatives and poverty alleviation



Interaction program on Land use planning with Mayors and Deputy Mayors of Local Governments



TOT Training for the officials of LMTC



Training for Officials of Land Revenue Offices on Land Management and Administration



Program on Collaboration with University of Southern Queensland, Australia on conducting survey camp



International Workshop on "Capacity Building and Education Outreach in Advanced Geospatial Technologies and Land Management" organized by LMTC



International Workshop on "Land use planning and land administration: integration and decentralization" organized by LMTC



Training on unmanned aerial vehicle (UAV)/ Dron during professional course of survey officers



Survey Literature program conducted by LMTC

