

## PERSONAL INFORMATION



## Sanjaya Neupane

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[thasanjaya@gmail.com](mailto:thasanjaya@gmail.com)

12392351

Gender Male | Date of birth 19/02/1987 | Nationality Nepalese | Marital status Married |

## EDUCATION

Year of Completion	Academic Program
Anticipated date of graduation 2026 AD	<b>Masters of Arts in Economics (MA)</b>
2023 AD	<b>Executive Masters of Business Administration (e-MBA)</b>
2017 AD	<b>Masters of Science in Renewable Energy Engineering (MSREE)</b>
2009 AD	<b>Bachelors of Engineering in Mechanical Engineering (BE)</b>
2005 AD	<b>Intermediate of Science (I.Sc)</b>
2003 AD	<b>School Leaving Certificate (SLC)</b>

## Academic Program

**Masters of Arts in Economics (MA)**

Patan Multiple Campus, Faculty of Social Science and Humanities, Tribhuvan University.  
<https://pmc.tu.edu.np/>

**Executive Masters of Business Administration (e-MBA)**

Kathmandu University School of Management, Kathmandu University. <http://kusom.edu.np>

**Masters of Science in Renewable Energy Engineering (MSREE)**

Pulchowk Campus, Institute of Engineering, Tribhuvan University. <http://mech.pcampus.edu.np>

**Bachelors of Engineering in Mechanical Engineering (BE)**

School of Engineering, Kathmandu University, Dhulikhel, Nepal. <http://mech.ku.edu.np/>

**Intermediate of Science (I.Sc)**

School of Science, Kathmandu University, Dhulikhel, Nepal. <http://sos.ku.edu.np/>

**School Leaving Certificate (SLC)**

Kabhre Secondary School, Banepa.

## TRAINING

Completion	Training
September 13, 2023 to September 15, 2023	<b>Training of Master Trainers on Energy Efficient HVAC Systems</b>
July 19, 2023 to August 2, 2023	<b>Railway Planning and Construction Technology for Nepal</b>
June 12, 2023 to June 16, 2023	<b>Training For Trainers For Detailed Feasibility Studies, Solar Rooftops &amp; Mini-Grids, Solar Water Pumps And Battery Technologies</b>
May 7, 2023 to May 11, 2023	<b>Capacity Development Workshop On Energy Audit Training</b>
May 27, 2023 to May 31, 2019	<b>Laboratory Training Course of Finite Element Analysis and its application in Modern Engineering Design</b>

## Training

**Training of Master Trainers on Energy Efficient HVAC Systems**

BUILDING Energy Efficiency in Nepal (BEEN)- Switch Asia Programme

**Railway Planning and Construction Technology for Nepal**

Department of Science and Technology -The Peoples' Republic of China

**Training For Trainers For Detailed Feasibility Studies, Solar Rooftops & Mini-Grids, Solar Water Pumps And Battery Technologies**

Centre For Energy Studies, Institute of Engineering, Tribhuvan University In Collaboration With Promotion of Solar Technologies For Economic Development (POSTED) implemented by GIZ And AEPC

**Capacity Development Workshop On Energy Audit Training**

Centre For Pollution Studies, Institute of Engineering, Tribhuvan University – University Grants Commission, Nepal

**Laboratory Training Course of Finite Element Analysis and its application in Modern Engineering Design**

Department of Mechanical Engineering, Pulchowk Campus, Institute of Engineering, Tribhuvan University– University Grants Commission, Nepal

## ACADEMIC WORK EXPERIENCE

September 2024 to till date

**Deputy Head, Examination Control Division**

Institute of Engineering, Chakuapat, Lalitpur, Nepal. <http://exam.ioe.edu.np/>

- To develop and promote the internal and external profile of the Division
- To actively assist the Head of the Division in ensuring the good professional practice, standards.
- To plan and conduct exam
- To manage Question Paper
- To compile result and publish
- To implement policy
- To manage record and database of exam
- To communicate and coordinate with faculties
- To train faculties regarding exam activities

- To strive for continuous improvement of the student result

May 2018-till date

**Assistant Professor, Department of Mechanical and Aerospace Engineering**  
Pulchowk Campus, Pulchowk, Lalitpur, Nepal. [www.mech.pcampus.edu.np](http://www.mech.pcampus.edu.np)

- To teach masters student related to applied engineering i.e. System Mathematics, Energy Finance and Economics, Financial Management, Strategic Management, Thermal Engineering etc.
- To teach mechanical and aerospace engineering related subjects i.e. Advance Mechanical Design, Theory of Mechanism and Machine I & II, Energy Resources, Engineering Mechanics, Fundamentals of Thermodynamics and Heat Transfer, Engineering Drawing – I & II, and Workshop Technology.
- To supervise BE final year students during the project work.
- To conduct laboratory works and field visits of mechanical engineering related subject's i.e. Advance Mechanical Design, Theory of Mechanism and Machine I & II, Fundamentals of Thermodynamics and Heat Transfer Engineering Mechanics, Engineering Drawing – I & II, and Workshop Technology, Energy Resources.

December 2018- December 2022

**Deputy Head, Department of Mechanical and Aerospace Engineering**  
Pulchowk Campus, Pulchowk, Lalitpur, Nepal. [www.mech.pcampus.edu.np](http://www.mech.pcampus.edu.np)

- To develop and promote the internal and external profile of the department.
- To actively assist the Head of the department in ensuring the good professional practice, standards, and quality of teaching and learning of subject/s through proper dialogue with the faculty members
- To set internal examination, co-ordinate on marking schemes and moderating examinations and assessment processes at the department
- To administer online classroom and manage online classes via MS-Teams, Moodle, Google Classroom
- To ensure timely and adequate provision of teaching materials, equipment required for the effective teaching of the subject
- To ensure the maintenance and upkeep of laboratory equipment related to the subject at the department in regularly period.
- To plan and schedule the lecture and laboratory works and assign to the faculty members.
- To conduct Extra Curricular activities within the college when necessary.

September 2013 – May 2018

**Department Assistant, Engineering Science and Humanities**  
Kantipur Engineering College. Dhapakhel-23, Lalitpur, Nepal. . [www.kec.edu.np](http://www.kec.edu.np)

February 14, 2010 – May 2018

**Senior Lecturer**  
Kantipur Engineering College. Dhapakhel-23, Lalitpur, Nepal. [www.kec.edu.np](http://www.kec.edu.np)

- To teach mechanical engineering related subjects i.e. Energy Environment and Society, Engineering Professional Practice, Engineering Thermodynamics, Engineering Drawing, and Workshop.
- To conduct laboratory works and field visits of mechanical engineering related subject's i.e. Energy Environment and Society, Engineering Thermodynamics, Engineering Drawing, and Workshop.
- To conduct Extra Curricular activities within the college when necessary.

## PROFESSIONAL WORK EXPERIENCE

November - December 2023

**Detail Feasibility Study Trainer**

- Centre for Energy Studies supported by GIZ, POSTED Program , Nepal.  
To provide 15 days training for Detail Feasibility Study of Solar Minigrid, Roof Top and Solar Water Pump

August – November 2022

**Renewable Energy Expert**

- TD Energy and Multi construction supported by WECS, Nepal.  
To study and find the Status of Clean Energy Cooking Technologies used in major cities of Nepal (Pokhara and Butwal)

August – November 2022

**Renewable Energy Expert**

**TD Energy and Multi construction supported by WECS, Nepal.**

- To study and find the Status of Clean Energy Cooking Technologies used in major cities of Nepal (Pokhara and Butwal)

August – November 2020

**Renewable Energy Expert**

Green Innovative Development Consultancy Pvt. Ltd. , [greeninnovative1@gmail.com](mailto:greeninnovative1@gmail.com)

- To preparation of Energy Plan for Khaniyabash Rural Municipality

- December 2019 - July 2020 **Renewable Energy Expert**  
Green Innovative Development Consultancy Pvt. Ltd. , greeninnovative1@gmail.com  
▪ Preparation of Energy Plan for Neelkanth Municipality
- August 2018 – July 2019 **Mechanical Engineer**  
Technoquarry Consults Pvt. Ltd., scbaral2000@gmail.com  
▪ Review on Detail Design and Construction Supervision of Lower Hewa Khola HPP (22.1 MW), Panchatar
- February 2018 – July 2018 **Team leader**  
Green Innovative Development Consultancy Pvt. Ltd. Supported by MOFALD  
▪ Third Party Monitoring of Installed Renewable Energy Technology
- September 2017 - January 2018 **Mechanical Engineer**  
Citizen Investment Trust (Ownership of Nepal Government)  
▪ to assess the reliability 40kWp solar backup power system
- January - May 2015 **Micro hydro Expert**  
Environmental Conservation and Social Research Center (ECSRC) supported by Alternative Energy Promotion Center  
▪ To perform Third-party Monitoring/ Verification of Installed Micro hydro systems
- November- December 2014 **Trainer**  
Ministry of Forests and Soil Conservation (MoFSC) GON, International Centre for Integrated Mountain Development (ICIMOD) and Research Centre for Applied Science and Technology (RECAST), T.U.  
Training on the Production and Use of Bio-briquettes and Installation and testing of Rocket Stoves.

## RESEARCH PUBLICATION

- D. Niraula, S. Neupane And T. R. Subedi, "Techno-Economic Analysis Of Radial Distribution Systems Through Optimal Sizing And Sizing Of Capacitor Banks," International Research Journal Of Modernization In Engineering Technology And Science, Vol. 3, No. 7, July 2021.
- A. Bhattarai, S. Neupane, K. D. And A. Manandhar, "Prince2 Versus Scrum: A Comparative Study," Journal Of Recent Activities In Production, Vol. 5, No. 3, September 2020.
- D. Niraula, S. Neupane And T. R. Subedi, "Techno-Economic Analysis Of Performance Improvement Of Jomsom Distribution Feeder, Kobang Through Optimal Sizing And Sizing Of Capacitor Banks, Design/Selection And Grid Impact Analysis Of Injection Of Distributed Energy Resources (Ders)," International Research Journal Of Modernization In Engineering, August 2021.
- A. Ghimire, N. Bhattarai and S. Neupane, "Financial Modelling For Subsidy Estimation For 1 kW," International Research Journal of Modernization in Engineering Technology and Science, vol. 3, no. 11, November 2021.
- Ajay Shah, **Sanjaya Neupane**, Kamal Darlami. Impact Study of the Hetauda-Dhalkewar-Inaruwa Transmission Line on the Operation of Integrated Nepal Power System. Adv. Engin. & Technol. [Internet]. 2023 Dec. 15 [cited 2023 Dec. 17];3(1):139-5. Available from: <https://www.nepjol.info/index.php/aet/article/view/60739>
- Neupane, D., Gurung, S., **Neupane, S.** *et al.* Power Sharing in Solar PV: Microhydro Hybrid System Using Power Angle Control Strategy. *J Control Autom Electr Syst* (2022). <https://doi.org/10.1007/s40313-022-00943-w>
- Khadka, N., Acharya, R., Parajuli, S., Sapkota, P., Giri, J., Adhikari, R., **Neupane, S.**, Surface Modification of Polyvinyl Alcohol-Nanocellulose Composites for Hydrophobic Self-Cleaning Solar Panel Cover. *Macromol. Symp.* 2022, 403, 2100485. <https://doi.org/10.1002/masy.202100485>
- Deependra Neupane, Sagar Kafle, Samundra Gurung, **Sanjaya Neupane**, Nawraj Bhattarai, Optimal sizing and financial analysis of a stand-alone SPV-micro-hydropower hybrid system considering generation uncertainty, *International Journal of Low-Carbon Technologies*, Volume 16, Issue 4, December 2021, Pages 1479–1491, <https://doi.org/10.1093/ijlct/ctab077>
- Sharma, R., Bhattarai, N., & **Neupane, S.** (2021). Risk Rating for Risk-Based Maintenance: A Case Study of Small

- Hydropower Plant in Nepal. Journal of the Institute of Engineering, 16(1), 87–94. <https://doi.org/10.3126/jie.v16i1.36560>
- Kamal Darlami, Abhimanyu Khadka, Aayush Bhattarai, **Sanjaya Neupane**, Ashish Manandhar. “Numerical Simulation of Thermal Load Stress Development on Thermo-Activated Pile Foundation.” Journal of Thermal Energy Systems(e-ISSN: 2582-5747) (2020).
- Ramesh Adhikari, **Sanjaya Neupane**, Bhakta Bahadur Ale. “Planning and Analysis of Optimum Operation of Upper Tamakoshi Hydroelectric Project.” Proceedings of 8th IOE Graduate Conference. Kathmanudu: IOE, 2020.): 1-7.
- Nishan Khadka, Sulav Parajuli, Aayush Bhattarai, **Sanjaya Neupane** "A Study of Optimization of Aircraft Separation using the Time Based Separation at Tribhuvan International Airport." *World Academics Journal of Engineering Sciences* 7.2 (2020): 1-7.
- **Neupane, S.**, A. K. Jha, and A. P. Sah. “Financial Analysis of 18kW Solar Photovoltaic Baidi Microgrid at Baidi, Tanahun, Nepal”. Journal of the Institute of Engineering, vol. 15, no. 1, Feb. 2020, pp. 229-36, doi:10.3126/jie.v15i1.27739.
- **Sanjaya Neupane**, Ajay Kumar Jha. “Performance Evaluation of 18kW Solar Photovoltaic Baidi MicroGrid at Baidi, Tanahun, Nepal.” Proceedings of IOE Graduate Conference. Lalitpur: IOE , 2017. 537-542.

### PROJECTS UNDERTAKEN DURING ENGINEERING PROGRAM

2017- Second Year MSREE	<b>“Performance evaluation of 18kW solar PV micro-grid at Baidi Tanahun, Nepal” under the supervision of Associate Professor Dr. Ajay Kumar Jha</b>
2009-Fourth Year, BE Mechanical	Study on rural cold storage and design for the modification of KU cool storage under the supervision of Professor. Dr. Bim Pd. Shrestha.
2008-Third Year, BE Mechanical:	Selection, design and fabrication of turbine: A case study of Dhakmar Micro hydro power under the supervision of Professor Dr. Ing. Ramesh K. Maskey
2007-Second Year BE Mechanical:	Rain water harvesting and waste water management in Kathmandu University under the supervision of Professor Dr. Bhola Thapa
2006-First Year: BE Mechanical	Improved solar cooker using mirror in a parabolic reflector under the supervision of Er. Raju Shrestha

### RESEARCH INTEREST

- Energy storage system,
- Grid and Off-Grid electric system from solar photovoltaic,
- Machine and Machine Dynamics, Engineering Mechanics .

### PERSONAL SKILLS

Mother tongue(s)	Nepali				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	A2	A2	A2	A2	A2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user

#### Computer skills

- Basic Knowledge of LEAP (Energy modelling)
- Basic Knowledge of Solid Works (3D modelling)
- Good command of AutoCAD (2D and 3D)
- Basic Knowledge of Computer Programming in C, Pascal
- Microsoft Office package
- MS Teams, Moodle and Google Classroom

### ADDITIONAL INFORMATION

- Honours and awards**
- Regular Student of Masters of Science in Renewable Energy Engineering
  - KU-UMN and Banepa Municipality Scholarship for I.Sc. program
- Memberships**
- Permanent Member of Nepal Engineering Council
  - NEC Number: 1022 “Mechanical” “A” /2009
  - Life Member of Society of Mechanical Engineers, Nepal (SOMEN)
- References**
- Professor Triratna Bajracharya, Ph.D.**  
Retired Professor and Former Director  
Centre for Energy Studies, IOE, Nepal  
Department of Mechanical and Aerospace Engineering, Pulchowk Campus, IOE, Nepal  
E-mail : [triratna@ioe.edu.np](mailto:triratna@ioe.edu.np)
- Associate Professor Dr. Ajay Kumar Jha**  
Department of Mechanical and Aerospace Engineering, Pulchowk Campus, IOE, Nepal  
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E-mail : [jhaajaykumar@live.com](mailto:jhaajaykumar@live.com), [akjha@ioe.edu.np](mailto:akjha@ioe.edu.np)