नेपाल इन्जिनियरिंग परिषद्

Nepal Engineering Council

Instructions for PE Registration Applicants

April, 2025

1. INTRODUCTION

The process of registering as a Professional Engineer (PE) with the Nepal Engineering Council (NEC) involves eligibility verification and a comprehensive assessment of competence, including a written examination and an interview. In the initial stage of the application, eligibility is determined based on the Working Procedures and Guidelines approved by the NEC. The application process is facilitated by two supporters: the first supporter is selected by the applicant, while the second is appointed by the NEC following the confirmation of eligibility.

This document is prepared to assist the applicant for the preparation of application which includes the eligibility and the preparation of the competence assessment report. The application stage procedure is shown in the table below.

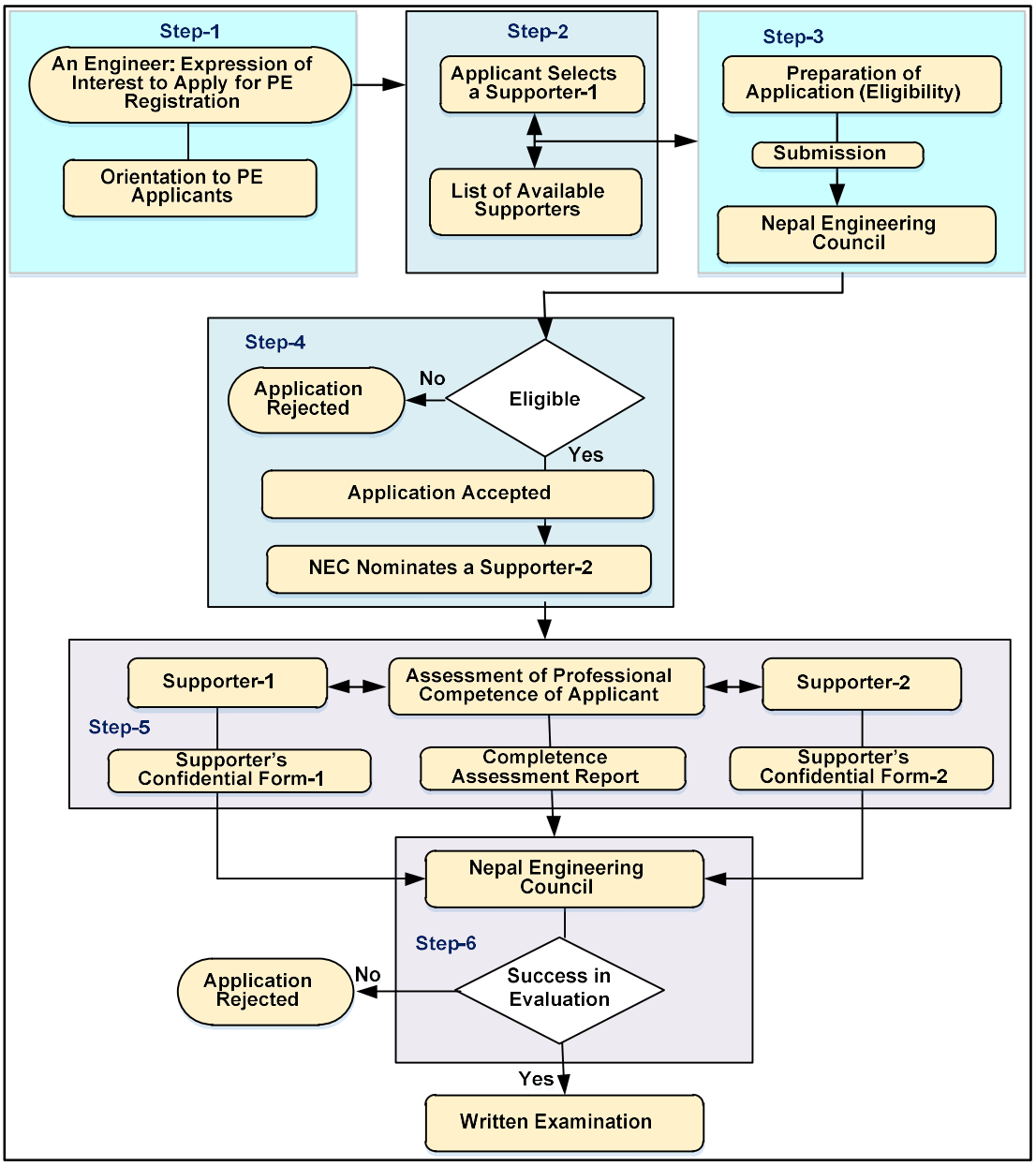


Figure 1: PE Registration Application Procedure

2. ELIGIBILITY CRITERIA

Eligibility for the applicant or the PE registration, as approved by the Nepal Engineering Council Rules, 2057 is mainly focused on the academic qualification, professional experience, and Continuous Professional Development (CPD) during the previous year. The eligibility of an applicant is assessed in terms of following criteria.

1.1 Academic Qualification

The minimum academic qualification required for registration as a Professional Engineer (PE) is a Master's degree in Engineering from a university or institution recognized by the Nepal Engineering Council (NEC). If there are concerns regarding the recognition of the Master's degree, the NEC may request additional documentation to verify the status of the university. The recognition of academic degrees and higher education institutions (HEIs) is one of the responsibilities mandated to NEC, which is carried out by a dedicated committee established for this purpose.

1.2 Professional Experience

1.2.1 General Experience

Engineering profession is diverse and related to the very wide range of disciplines such as management, administrations and social welfare. A Professional Engineering (or registered engineer in the general category) experience is mainly related to the engagement of an engineer with the responsibility of an engineering activities or services. The engineering responsibility in the specific project and program mainly consists of the following but not limited to:

Performing in the engineer's professional field (areas of his/her qualifications) and its continuation,

Conducting research and development, and publication, of technical articles related to the engineer's professional field,

Contributing to develop knowledge on underlying requirements concerning qualifications and expertise of engineers as stipulated in international agreements and treaties including the provisions of the World Trade Organization (WTO) and the International Engineering Alliance (IEA).

Performing the duties in:

- project management techniques,
- financial analysis of projects,
- laws, bylaws, guidelines, codes, and specifications related to the engineering profession and its performance,
- The areas of the competence standards and respective indicators.

Engagement in the areas mentioned in the CPD activities outside of those listed above may also be considered and as above do not necessarily need to be technical or engineering orientated, and can cover any learning that develops the professional capacity of an engineer, for example learning a language, IT skills, training on socio-economic issues to improve understanding of social needs, etc.

Self-development shall be taken as the main origin for the continuous professional development. A person with the interpersonal skill is good for the society and for profession. There are some areas to consider in this aspect of the continuous professional development.

- Interpersonal Skills: these skills are related to the personal quality to be good in the society such as: communication skills to enhance both verbal and non-verbal communication, practice active listening, and develop empathy; conflict resolution learning to the techniques for resolving conflicts, negotiating effectively, and mediating disputes; building relationships to cultivate trust, respect, and cooperation within personal and professional relationships.
- Leadership and team management: these may include the skills to motivate and lead the professional community and society by inspiring its members, setting clear goals an, and providing guidance and support. Furthermore, delegation of assign tasks based on team members' strengths and skills, for empowering them to take ownership of their responsibilities. Similarly, a professional engineer shall be able for team building to foster a collaborative and inclusive team environment, encourage open communication, and resolve conflicts within the team.
- Decision Making: the decision making is an important quality for a professional which derives after the analytical thinking based on the relevant information, and evaluating alternative options before making any decisions. Decision making shall be guided by the problem solution by developing creative solutions, weigh the pros and cons of different approaches, and make informed decisions.

An engineer could develop his/he career in the various core technical as well as emerging sectors in the society. These skills can be achieved by pursuing further education, attending workshops and seminars, and seek opportunities for professional growth. Similarly, building professional networking can be taken one of the success factors for career development. The professional experience can be broadly included in the following sections.

a. Technical Skill

An engineer in the general professional responsibility can be engaged in the core technical fields, which are related to his/her acquired knowledge and skill as listed as below:

- Detail design
- Environmental design/technology/impact analysis
- New design skills
- Procurement – estimates, bids and tenders
- Construction site management
- Computer Aided Design (CAD) and Building Information Model

- Energy efficiency/energy conservation
- New building materials
- New forms of contract and partnering

Similarly, as engineering professional can be related to the legislative domain. There are country specific laws and regulations related to the engineering services and industries. Some of them are as:

b. Information Technology

Most of the engineering professional sectors are performed o the great assistance of Information Technology (IT), which is an emerging for many fields of the human civilization. Therefore, an engineer could be engaged in the services related to the IT. Application of IT in the particular field of engineering is taken as an emerging professional engagement. It broadens the scope of the engineering service especially for the new generation.

c. Project Management

An engineer could develop his/her career related to the financial planning and management - reporting systems, establishing a budget, cost control systems, cash flow, and profit and loss account, balance sheets, VAT and taxation, project finance, and government grants. These sectors are also emerging career paths in terms of project management by acquiring the knowledge in the procurement procedures, contract management, terms of appointment and contract administration, risk management, disputes resolution and others. The emerging issues of the project management are very attractive job-areas of the engineers.

d. Energy Efficiency

An Engineer could be engaged in the specialized career opportunity in the areas of recent trends such as energy efficiency, environment and conservation, public sector management, research and other areas for innovation. Conducting trainings and other capacity building activities for the specialized field of engineering are also an emerging field of an engineer.

e. Health and Safety

Engineering sector is very much related to the health, safety and public welfare. These areas may include the specialization in the legislation, evaluation of role of Health and Safety Executive (HSE), personal responsibility for health, safety and welfare, collaborative approach for building safe infrastructure. Engineers shall develop the skill to work in the collaboration with the other public sectors and concerns for the issues on the sustainability, economics and societal development.

1.2.2 Experience in the responsible position

Any professional expertise or proficiency is primarily demonstrated by the level of involvement in a responsible position. The responsible position of an engineer can be defined by the degree of

accountability assumed during the execution of duties. Furthermore, a responsible position of significant engineering activities refers to a role in which an engineer is accountable for major technical, managerial, or decision-making tasks within a project, organization, or industry. This typically involves leadership, problem-solving, compliance with standards, and ensuring the successful completion of engineering initiatives and tasks. Some examples of the responsible position can be taken as:

a. Technical Leadership:

- Leading the design, analysis, and implementation of a part or section of complex engineering systems.
- Ensuring compliance with engineering principles, codes, and regulations.
- Reviewing and approving technical drawings, models, and calculations.

b. Project Management

- Planning and overseeing engineering projects from inception to completion.
- Managing budgets, resources, and timelines.
- Coordinating cross-functional teams, including engineers, contractors, and stakeholders.

c. Decision-Making & Accountability

- Making critical decisions that impact safety, efficiency, and performance.
- Assuming responsibility for project outcomes and risk mitigation.
- Evaluating and troubleshooting engineering challenges.

d. Compliance & Safety

Ensuring adherence to legal, environmental, and industry-specific regulations.

- Implementing safety protocols and conducting risk assessments.
- Maintaining ethical and professional engineering standards.

e. Innovation & Continuous Improvement

- Driving research and development for new technologies and solutions.
- Improving existing processes, materials, and designs.
- Staying updated with advancements in engineering and industry trends.

f. Mentorship & Team Development

- Training and mentoring junior engineers and technical staff.

- Encouraging collaboration and knowledge sharing within teams.
- Establishing best practices and engineering methodologies.
- Examples of Roles with Significant Engineering Responsibilities.

Some examples of the responsible positions in the context of Nepal can be listed as below:

- Chief of the Departments, Divisions, Sections and Units or branches of government or any other public engineering institutions,
- Expert engineer: Team lead and specific sector expert engaged in the consulting engineer companies,
- Individual expert trainer/certified professional: an engineer involved in the various engineer sector as an individual engineering expert in the capacity building, consulting or supervision and other sectors rendering services to the public and private institutions,
- Project or financial Manager (Engineering): persons involved in the various engineering project initiatives undertaken by the donor agencies in Nepal for project development and implementation. These initiatives mainly intended for providing financial resources, technical assistance, and strategic guidance to various programs.
- Lead Research and Development Engineer: An engineer holding senior position in engineering research institutes for the research and development sector of an engineering discipline.

1.3 Continuous Professional Development

An engineer seeking registration as a Professional Engineer (PE) must complete a minimum of 30 hours of Continuous Professional Development (CPD) in the preceding year. CPD requirements are essential for both obtaining and renewing the PE title.

The format and weight-factors for CPD records are outlined in the application form. CPD hours are calculated based on the weight-factor assigned to each activity and the actual duration (in hours) of engagement.

3. PREPARATION OF APPLICATION

The application preparation process is facilitated by a registered Professional Engineer (PE) of the Nepal Engineering Council (NEC), who serves in the role of a ‘Supporter’. The applicant is expected to receive guidance or mentorship from supporters at two key stages of the process. In the first stage, the supporter assists the applicant in understanding and meeting the eligibility criteria for PE registration. In the second stage, the focus shifts to the preparation of the *Competence Assessment Report*.

The first ‘Supporter’ is selected by the applicant upon deciding to apply for PE registration. This

supporter must be chosen from the list of registered Professional Engineers provided in the **Appendix-I** of this document. The second supporter is nominated by the NEC after the applicant's eligibility has been confirmed. Both supporters assist the applicant in preparing the *Competence Assessment Report*, as illustrated in Figure 1.

APPENDIX I: List of Registered PE in Nepal Engineering Council

S/N	Name	Area of Specialization	Master's Degree	NEC Reg. No.	Email	Contact no.
1	Er. Shambhu KC	Procurement Urban Infrastructure, Contract Management	Masters of Engineering (Urban Management)	444 "Civil"	shambhu2017@gmail.com	9851082621
2	Er. Chandra Bahadur KC	Project Management	M.E. in Construction Engineering and Management	678 "Civil"	bahadurckc@yahoo.com	9843003730
3	Er. Dilli Raman Niraula	Highway Engineering	M. Sc in Highway Engineering	2639 "Civil"	nirauladilli@gmail.com	9841900923
4	Er. Bikash Bahadur Shrestha	Biomedical Engineering	M Tech. Biomedical Engineering	115 "Electrical & Electronics"	bikashshrestha408@gmail.com	9851038698
5	Dr. Er. Sanjiv Shah	Structure, Hydropower, Geotechnical Engineering & Rock Mechanics	M.E. in Civil Engineering	1916 "Civil"	sanjiv@shahconsult.com	9851031739
6	Er. Sunil Babu Shrestha	Urban Planning, Environment development, PPP, civil Engineering	M.Sc. in Urban Planning	749 "Civil"	sunilbabushrestha@gmail.com	9851084015
7	Er. Rohit Kumar Bisural	Civil, Highway, Bridge, Construction Management	M. Sc. in Structural Engineering	2079 "Civil"	rohitbisural@gmail.com	9851224428

S/N	Name	Area of Specialization	Master's Degree	NEC Reg. No.	Email	Contact no.
8	Er. Kishore Kumar Jha	Civil Engineering & Urban Planning	M.Sc in Urban Planning	2928 "Civil"	kkjha.multinepal@gmail.com	9851025600
9	Er. Tulasi Prasad Sitaula	Building, Highway, Structure, Construction Management	M. Tech in Building Science and Construction Management	154 "Civil"	sitaulatp@gmail.com	9851091938
10	Dr. Er. Jagat Kumar Bhusal	Hydrology	Master in Hydrology	1970 "Civil"	bhusaljagat@gmail.com	9851139357
11	Er. Pramendra Krishna Shrestha	Civil Engineering	M. Sc. in Construction Management	755 "Civil"	pramendrakshrestha@gmail.com	9851093568
12	Er. Ram Krishna Sapkota	Project development & Management, Environment assessment, public Procurement and Contract Management	M. Sc in Environmental Engineering	404 "Civil"	rk.sapkota@yahoo.com	9851136773
13	Er. Prakash Bhakta Upadhyaya	Highway, Bridge, Railway Engineering	M. Sc. in Civil Engineering	675 "Civil"	p.upd568@gmail.com	9851011977
14	Er. Dipak Shrestha	Road Engineering, Bridge Engineering	Master in Geotechnical Engineering	180 "Civil"	dipakshresthatc@gmail.com	9841348147
15	Er. Kailash Kumar	Highway Engineering	M. Sc. in Construction	2290 "Civil"	kankuri@hotmail.com	9841244226

S/N	Name	Area of Specialization	Master's Degree	NEC Reg. No.	Email	Contact no.
	Shrestha		Management			
16	Dr. Er. Purushottam Dangol	Civil / Structural Engineering	M. Sc in Civil Engineering	3433 "Civil"	dr.dangolp@gmail.com	9851070082
17	Er. Dhruba Raj Thapa	Construction Management, Concrete/Cement Technology	M. Sc. in Construction Management	1548 "Civil"	dhrubatuna@gmail.com	9851063487
18	Er. Subodh Sharma	Electrical Engineering	M. E. in Electrical Engineering	303 "Electrical"	SubodhSharma6@yahoo.com	9848024652
19	Er. Uma Shankar Shah	Building Design, Irrigation Structure Design, Bridge, Suspension Bridge	M. Sc. in Structural Engineering	1787 "Civil"	umasah2016@gmail.com	9851112133
20	Er. Dr. Khemraj Sharma	Agri-Irrigation, Land & Water Resources Management	M.Sc. in Agriculture Engineering	16 "Ari-Irrigation"	khemraj.online@gmail.com	9841471144
21	Er. Ananta Acharya	Highway and Railway Engineering with related structures such as Bridges and retaining structures.	M.Sc. in Structural Engineering	969 "Civil"	anantaacharya50@gmail.com	9851172520
22	Er. Indra Lal Pradhan	Highway Planning and Design, Transportation Engineering,	M.E. in Civil/Transportation and	982 "Civil"	ilpradhan@hotmail.com	9841598021

S/N	Name	Area of Specialization	Master's Degree	NEC Reg. No.	Email	Contact no.
		Construction Management	Geotechnical)			
23	Er. Manohar Shrestha	Hydropower Development	M.Sc. in Hydropower Development	927 "Civil"	manoharshr@gmail.com	9851044881
24	Dr. Er. Ram Prasad Dhital	Renewable energy and electricity regulation	M.Sc. in Renewable Energy Engineering	287"Civil"	rpdhital123@gmail.com	9851076005
25	Er. Indu Sharma Dhakal	Civil and Highway Engineering	M. Sc. in Geotechnical Engineering	655 "Civil"	isdhakal@gmail.com	9851036222
26	Er. Jayaram Bhattarai	Civil Engineering (Road & Building Construction)	M.Sc. in Water Resources Engineering	1755 "Civil"	bhattaraijr@gmail.com	9851209605
27	Er. Hari Prasad Dhakal	Highway Engineering, Procurement	M.Sc. in International Highway Engineering	453 "Civil"	hpdhakal01@gmail.com	9841283540
28	Er. Ram Kumar Lamsal	Highway, Transportation Engineering	M. E. in Geotechnical & Transportation Engineering	74 "Civil"	ramlamsal@live.com	9810198260
29	Er. Umesh Jha	Civil Engineering, Roads/ Highways and Bridge	M. Sc. in Highway Engineering	1104 "Civil"	jhaumesh1958@gmail.com	9851126111
30	Er. Hariom Srivastav	Highway, Transportation	M.E. in Civil Engineering	243 "Civil"	srivastavhariom@gmail.com	9851037539

S/N	Name	Area of Specialization	Master's Degree	NEC Reg. No.	Email	Contact no.
		Engineering				
31	Er. Prem Kumar Srivastava	Water Resources Engineering, Hydraulic Engineering	M.Sc. in Water Resources Engineering	1862 "Civil"	sr.premk@gmail.com	9851107625
32	Er. Bindeshwar Prasad Sah	Design of Highway and Construction Management	M.Sc. in Construction Management	2063 "Civil"	bshah851@gmail.com	9851107147
33	Er. Dr. Bharat Raj Pahari	Building Technology, Construction Management, energy efficiency in building, teaching & research	Masters in Technology in Tropics	1520 "Civil"	bharatpahari@gmail.com	9851108579
34	Er. Padam Prasad Pokharel	Hydropower	M.Sc. in Civil Engineering	32 "Civil"	padam.pokharel12@gmail.com	9851005152
35	Dr. Er. Thusitha Chandani Shahi	Highway, Traffic and Transportation Engineering	M. Sc in Highway Engineering	1652 "Civil"	thusithacs@nec.edu.np	9851141057
36	Er. Hari Krishna Shrestha	Hydrology, River and Sediment Management, Groundwater Modelling	M. Sc in Hydrology	1969 "Civil"	hari.k.shrestha@gmail.com	9851006010
37	Er. Rupak Rajbhandari	Civil Engineering, Procurement, Contract Management	M. Sc. in Construction Management	03 "Civil"	Rupak_Rajbhandari@yahoo.com	9841380463