Nepal Engineering College

Information about Civil Engineering

1. What is Civil Engineering?

Have you ever wondered how the tallest skyscrapers, longest bridges or gigantic hydropower plant are made? Behind every structure around us, there is the meticulous planning and execution of Civil Engineers. Civil Engineering is mostly about designing, building, and maintaining the infrastructures that keeps our world connected and moving. From constructing earthquake-resistant buildings to ensuring clean water reaches every home, Civil Engineers turn ideas into reality. If you dream of creating structures that stand the test of time and want a career that combines creativity, technology, and real-world impact — Civil Engineering is your path to shaping the future!

2. Unique features of Civil Engineering?

Civil Engineering offers several advantages, especially for students looking for **diverse scope after a bachelor's degree** and a career with visible, long-lasting impact. One of the biggest strengths of Civil Engineering is its wide-ranging applications — from structural design, transportation, water supply, and environmental protection to urban development and disaster-resilient infrastructure. Unlike fields that may confine you to factories or coding rooms, Civil Engineers work in both outdoor project sites and technical offices, providing a dynamic and balanced work environment.

3. What are the opportunities?

After a bachelor's degree, Civil Engineering graduates enjoy diverse career options — pursuing higher studies in structural engineering, geotechnical engineering, construction management, environmental engineering, or even transitioning into entrepreneurship, urban planning, or public service. Civil Engineers are also in constant demand globally, as developing and maintaining infrastructure like roads, bridges, tunnels, water systems, and smart cities is essential for every nation.

4. How long has it been initiated?

Bachelor in Civil Engineering is being offered in Nepal Engineering College since its establishment in 1994. As the one of the earliest engineering institute, Nepal Engineering College has produced large mass of civil engineers who are working as accomplished professionals and academicians all over the world.

For further details please contact the following

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Curriculum Structure:

Pokhara University
Bachelor of Civil Engineering, 2022

Year	: I	Semester I				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CHM 110	Applied Chemistry	2	2	1	2
2	PHY 110	Applied Physics	3	3	1	2
3	MTH 110	Calculus I	3	3	2	0
4	ENG 110	Communication Techniques	2	2	2	0
5	CMP 112	Computer Programming	3	3	1	2
6	MEC 112	Engineering Drawing	2	0	0	6
		Sub-total	15	13	7	12
Year	: I	Semester II				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	MTH 150	Algebra and Geometry	3	3	2	0
2	MEC 150	Applied Mechanics	4	4	2	0
3	ELE 112	Basic Electrical and Electronics Engineering	3	3	2	2
4	CVL 110	Civil Engineering Materials	2	2	0	2
5	CVL 112	Civil Engineering Workshop	1	0	0	3
6	GTE 150	Engineering Geology	3	3	0	2
7	MEC 114	Introduction to Energy Engineering	2	2	1	1
		Sub-total	18	17	7	10
Year	: II	Semester III				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	ARC 150	Building Technology	2	2	0	2
2	MTH 210	Calculus II	3	3	2	0
3	WRE 212	Fluid Mechanics	3	3	2	2
4	MTH 252	Numerical Methods	2	2	1	2
5	STR 216	Strength of Materials	3	3	2	1
6	CVL 216	Surveying I	3	3	1	3
		Sub-total	16	16	8	10
Year	: II	Semester IV				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	MGT 250	Engineering Economics	3	3	1	0
2	WRE 250	Hydraulics	3	3	2	2
3	MTH 216	Probability and Statistics	2	2	2	0
4	GTE 252	Soil Mechanics	3	3	2	2
5	STR 252	Structural Analysis I	3	3	2	1
6	CVL 252	Surveying II	3	3	1	3
		Sub-total	17	17	10	8
Year	: III	Semester V				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	WRE 310	Engineering Hydrology	2	2	2	1
2	CVL 318	Estimating and Valuation	3	3	2	0
3	GTE 310	Foundation Engineering	3	3	2	1
4	STR 314	Structural Analysis II	3	3	2	1
5	TRP 310	Transportation Engineering I	3	3	1	1
6	ENV 310	Water Supply Engineering	3	3	2	1
		Sub-total	17	17	11	5
Year	: III	Semester VI				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CVL 350	Project I	1	0	0	2
2	STR 312	Concrete Technology and Masonry Structure	3	3	2	2
3	STR 354	Design of Steel and Timber Structure	3	3	2	0
4		Elective I	3	3	0	0
5	WRE 352	Irrigation and Drainage Engineering	3	3	2	0
6	ENV 352	Sanitary Engineering	3	3	2	1
7	CVL 316	Survey Field Project	1	0	0	2
8	TRP 352	Transportation Engineering II	3	3	1	1
		Sub-total	20	18	9	8
Year	: IV	Semester VII				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CVL 441	Project II	3	0	0	6
2	CVL 412	Construction Project Management	3	3	2	0
3	STR 352	Design of R.C.C. Structures	3	3	2	1
4		Elective II	3	3	0	0
5	CVL 416	Engineering Professional Practice	2	2	0	0
6	WRE 410	Hydropower Engineering	3	3	2	1
		Sub-total	17	14	6	8
Year	: IV	Semester VIII				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1		Elective III	3	3	0	0
2	INT 484	Internship	6	0	0	12
		Sub-total	9	3	0	12
		Total	129	115	58	75

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