POKHARA UNIVERSITY

Bachelor of Mechanical Engineering, 2024 Curricular Structure

Year: I Semester: I

Teaching Schedule								
S. N.	Course Code	Course Title	Credits	L	T	P	Total	
1	MTH 110	Calculus-I	3	3	2	0	5	
2	PHY 110	Applied Physics	3	3	1	2	6	
3	ELE 112	Basic Electrical and Electronics Engineering	3	3	2	2	7	
4	CMP 110	Fundamentals of Computer Programming	3	3	1	2	6	
5	MEC 114	Engineering Drawing-I	2	2	0	4	6	
6	MEC 116	Engineering Mechanics-I	3	3	1	0	4	
Sub-total Sub-total			17	17	7	10	34	

Year : I Semester : II

Teaching Schedule								
S. N.	Course Code	Course Title	Credits	L	T	P	Total	
1	MTH 150	Algebra and Geometry	3	3	2	0	5	
2	CHM 110	Applied Chemistry	2	2	1	2	5	
3	MEC 122	Engineering Drawing-II	2	2	0	4	6	
4	MEC 124	Engineering Mechanics-II	3	3	1	0	4	
5	MEC 126	Engineering Thermodynamics-I	3	3	1	1	5	
6	MEC 128	Workshop Technology	3	3	0	3	6	
		Sub-total	16	16	5	10	31	

Year: II Semester: III

Teaching Schedule								
S. N.	Course Code	Course Title	Credits	${f L}$	Т	P	Total	
1	MTH 210	Calculus-II	3	3	2	0	5	
2	ELE 232	Electrical Machines	3	3	1	1	5	
3	MEC 232	Instrumentation and Measurement	3	3	1	1	5	
4	MEC 234	Strength of Materials	3	3	1	1	5	
5	MEC 236	Engineering Thermodynamics-II	3	3	1	1	5	
6	MEC 238	Manufacturing and Production Processes	3	3	1	3	7	
Sub-total			18	18	7	7	32	

Year: II Semester: IV

Teaching Schedule								
S. N.	Course Code	Course Title	Credits	L	Т	P	Total	
1	MTH 252	Numerical Methods	2	2	1	2	5	
2	ELE 246	Control Systems	3	3	1	1	5	
3	MEC 240	Material Science	3	3	1	1	5	
4	MEC 242	Mechanics of Solids	3	3	1	1	5	
5	MEC 244	Fluid Mechanics	3	3	1	1	5	
6	MEC 246	Theory of Machines and Mechanism	3	3	2	0	5	
Sub-total				17	7	6	30	

Year: III Semester: V

Teaching Schedule								
S. N.	Course Code	Course Title	Credits	L	T	P	Total	
1	MTH 216	Probability and Statistics	2	2	2	0	4	
2	MEC 350	Fluid Machines	3	3	1	1	5	
3	MEC 352	Dynamics of Machinery	3	3	1	1	5	
4	MEC 354	Design of Machine Elements	3	3	1	2	6	
5	MEC 356	Heat and Mass Transfer	3	3	1	1	5	
6	IND 350	Industrial Engineering and Management	3	3	1	0	4	
Sub-total Sub-total				17	7	5	29	

Year: III Semester : VI

Teaching Schedule								
S. N.	Course Code	Course Title	Credits	L	T	P	Total	
1	ENG 360	Technical Communication Skill	2	2	0	2	4	
2	MEC 360	Finite Element Method	3	3	1	1	5	
3	MEC 362	Mechanical System Design	3	3	1	1	5	
4	MEC 366	Robotics and Automation	3	3	1	1	5	
5	IND 360	Fundamentals of Engineering Economics	3	3	1	0	4	
6		Elective-I	3	3	1	1	5	
7	MEC 368	Minor Project	1	0	0	3	3	
Sub-total				17	5	9	31	

Year : IV Semester : VII

Teaching Schedule								
S.N	Course Code	Course Title	Credits	L	T	P	Total	
1	MEC 470	Hydraulic and Pneumatic Systems	3	3	1	1	5	
		Project Management and Professional						
2	IND 470	Practice	3	3	1	0	4	
3	MEC 472	Energy and Environment	3	3	1	0	4	
4	MEC 476	Automotive Technology	3	3	1	1	5	
5		Elective-II	3	3	1	1	5	
6	MEC 474	Major Project-I	1	0	0	3	3	
	Sub-total				5	6	26	

Year: IV Semester: VIII

Teaching Schedule								
S.N	Course Code	Course Title	Credits	L	T	P	Total	
1		Elective-III	3	3	1	1	5	
2	MEC 480	Major Project-II	2	0	0	6	6	
3	INT 482	Internship	6	0	0	12	12	
Sub-total			11	3	1	19	23	
Total credits : Grand Total					130			

Course Code: Each course is assigned a unique code that identifies it within the curriculum. This code indicates the discipline, the year and semester the course is typically offered, and its sequence within the program. The prefix letters denote the discipline, such as MEC - Mechanical Engineering, ELE - Electrical and Electronics Engineering, ENG-English, MTH - Mathematics, PHY - Physics, CHM - Chemistry, CMP- Computer Engineering, IND - Industrial Engineering and INT-Internship. Besides in teaching schedule the abbreviation such as L, T, P stands for Lecture, Tutorial, and Practical respectively.

Internship: The internship has duration of 12 weeks and must be completed in industrial or mechanical engineering-related workplaces or professional engagements. To qualify for the internship, students must have passed at least 70 credits.

Elective III: Elective III will be conducted on a modular basis.

The tutorial and practical components of the course should accommodate a maximum of 24 students per group, with classes divided into two groups for a total of 48 students.