

Pokhara University
Bachelor of Software Engineering
Curriculum Structure- 2022

Year I		Semester I				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	MEC 116	Basic Engineering Drawing	1	0	0	3
2	MTH 110	Calculus - I	3	3	2	0
3	CMP 122	Computer Workshop	1	0	0	3
4	ELX 110	Digital Logic	3	3	1	2
5	CMP 116	Discrete Structure	3	3	1	0
6	MTH 120	Problem Solving Techniques	3	3	1	0
7	CMP 124	Programming in C	3	3	1	3
Sub-total			17	15	6	11
Year I		Semester II				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	MTH 150	Algebra and Geometry	3	3	2	0
2	PHY 110	Applied Physics	3	3	1	2
3	ENG 110	Communication Techniques	2	2	2	0
4	ELX 176	Microprocessor and Computer Architecture	3	3	1	2
5	CMP 162	Object Oriented Programming in C++	3	3	1	3
6	CMP 168	Web Technology	3	3	1	3
Sub-total			17	17	8	10
Year II		Semester III				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CMP 228	Advanced Programming with Java	3	3	1	3
2	MTH 210	Calculus - II	3	3	2	0
3	CMP 160	Data Structure and Algorithms	3	3	1	3
4	CMP 222	Database Management system	3	3	1	3
5	MTH 216	Probability and Statistics	2	2	2	0
6	CMP 230	Software Engineering Fundamentals	3	3	1	2
Sub-total			17	17	8	11
Year II		Semester IV				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CMP 272	Analysis and Design of Algorithm	3	3	1	2
2	CMP 274	Computer Graphics and Multimedia	3	3	1	2
3	MTH 252	Numerical Methods	2	2	1	2
4	CMP 278	Object Oriented Design and Modeling through UML	3	3	1	2
5	CMP 270	Research Fundamentals	2	2	0	2
6	CMP 280	System Programming	3	3	1	2
Sub-total			16	16	5	12
Year III		Semester V				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CMP 266	Applied Operating Systems	3	3	1	2
2	CMP 342	Artificial Intelligence and Neural Networks	3	3	1	3
3	CMP 344	Computer Networks	3	3	1	2
4	CMP 336	Data Science and Machine Learning	3	3	1	2
5	CMP 338	Simulation and Modeling	3	3	1	2
6	CMP 340	Software Design and Architecture	3	3	1	2
Sub-total			18	18	6	13
Year III		Semester VI				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CMP 376	Agile Software Development	3	3	1	2
2	CMP 378	Cloud Application Development Foundation	3	3	0	2
3		Elective -I	3	3	1	2
4	MGT 320	Engineering Management	2	2	1	0
5	CMP 380	Network Programming	3	3	0	2
6	PRJ 360	Project I	1	0	0	2
7	CMP 382	Software Dependability	3	3	1	2
Sub-total			18	17	4	12
Year IV		Semester VII				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1	CMP 442	Distributed Systems and Cloud Computing	3	3	1	2
2		Elective II	3	3	1	2
3	MGT 250	Engineering Economics	3	3	1	0
4	MGT 332	Entrepreneurship and Professional Practice	2	2	1	2
5	CMP 438	Software Project Management	3	3	1	0
6	CMP 440	Software Testing, Verification, Validation and Quality Assurance	3	3	1	2
Sub-total			17	17	6	6
Year IV		Semester VIII				
S. N.	Course Code	Subject	Credit	Lecture	Tutorial	Practical
1		Elective III	3	3	1	2
3	INT 496	Internship	3	0	0	6
4	PRJ 452	Project II	3	0	0	6
Sub-total			9	3	1	14
Total			129	120	44	89