Course Structure

Pokhara University					
Bachelor in Computer Application, 2022 (Proposed Curriculum Structure)					
Year	**: I**	**Semester I**		**Revised**	
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	ENG 121	English for IT Professionals	3	3	1
2	MTH 131	Mathematics I	3	3	0
3	ELX 111	Digital Logic System	3	3	1
4	CMP 116	Computer Fundamental and Application	3	3	2
5	CMP 117	Programming Logic and Technique	3	3	0
6	CMP 111	Computer Application Workshop	1	0	3
		Subtotal	**16**	**15**	**7**
Year	**: I**	**Semester II**			
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	ENG 122	Business and Technical Communication	3	3	1
2	MTH 132	Mathematics II	3	3	0
3	ACC 131	Financial Accounting	3	3	1
4	CMP 118	Programming in C	3	3	3
5	ELX 112	Microprocessor and Computer Architecture	3	3	1
6	PRJ 151	Project I	1	1	2
		Subtotal	**16**	**16**	**8**
Year	**: II**	**Semester III**			
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	CMP 215	Object Oriented Programming using Java	3	3	3
2	CMP 227	Data Structure and Algorithms	3	3	2
3	CMP 221	Systems Analysis and Project Management	3	3	1
4	CMP 380	Web Technology I	3	3	3
5	CMP 230	Operating Systems	3	3	1
		Subtotal	**15**	**15**	**8**
Year	**: II**	**Semester IV**			
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	CMP 323	Software Engineering	3	3	1
2	CMP 226	Database Management System	3	3	3
3	CMP 242	Computer Graphics and Multimedia Technology	3	3	2
4	MTH 320	Probability and Statistics	3	3	0
5	CMP 402	Web Technology II	3	3	3
6	PRJ 251	Project II	2	1	3
		Subtotal	**18**	**16**	**11**
Year	**: III**	**Semester V**			
S. N.	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	MTH 230	Numerical Methods	3	3	1
2	CMP 317	**DotNet Technology**	3	3	3
3	CMP 336	Data Communication and Computer Network	3	3	2
4	ELE 322	Research Methodology	3	3	1
5	MTH 330	Mathematical Foundation in Computer Application	3	3	0
			15	**15**	**7**
Year	**: III**	**Semester VI**			
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	CMP 316	Data Science and Analytics	3	3	2
2	CMP 314	Management Information Systems	3	3	0
3	CMP 350	Simulation and Modeling	3	3	1
4	MGT 322	Organization Management	3	3	0
5		Elective I	2	3	-
5	PRJ 351	Project III	3	1	3
		Subtotal	**17**	**17**	**9**
Year	**: IV**	**Semester VII**			
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	CMP 401	Cyber Law and Professional Ethics	3	3	1
2	CMP 404	Mobile Application Development Technology	3	3	3
3	ECO 311	Applied Economics	3	3	0
4	INT 461	Internship	3	1	0
5		Elective II	3	3	-
		Subtotal	**15**	**13**	**5**
Year	**: IV**	**Semester VIII**			
SN	**Course Code**	**Subject**	**Credit**	**Lecture**	**Practical**
1	CMP 415	Cloud Computing	3	3	2
2	CMP 416	Digital Economy	3	3	2
3		Elective III	3	3	-
4	PRJ 451	Project IV	5	1	3
		Subtotal	**14**	**10**	**7**

		Total	126	107	55

Elective courses

Group A (Elective I and Elective II)		Group B (Elective III)
1. Data Mining and Warehousing	17. Distributed Database System	1. Knowledge Engineering
2. Geographical Information System	18. Internet of Things (IoT)	2. API Design and Development
3. Statistical Quality Control	19. Cryptography	3. Legal and Ethical Issues in e-Governance
4. Legal and Ethical Issues in e-Governance	20. Software Testing and Project Management	4. Formal Methods in Software Engineering
5. AI Ethics	21. Cyber security and Ethical Hacking	5. Fuzzy Logic with Engineering Application
6. IT Governance	22. Enterprise Cyber Security and Management	6. Human Computer Interaction
7. Digital Economy	23. Information System Audit	7. Offensive Security/Penetration Testing
8. Digital Marketing	24. International Business	8. Promotion Management
9. ICT Change Management	25. Advanced Techniques in Programming	9. Compiler Design
10. Advanced DotNet Programming	26. Cross-platform Mobile Development	10. Block chain Technology
11. Embedded System Programming	27. Image Processing with Python	11. IP Switching and Routing
12. Shell Script Programming	28. Server Design and Development	12. Network Programming
13. COM/DCOM Programming	29. Advance Database (PL/SQL)	13. Systems Servers and DevOps
14. Artificial Intelligence	30. Advanced Java Programming	14. Natural Language Processing
15. Professional Ethics and Integrity	31. Software Testing and Project Management	15. Deep Learning
16. Account for Managers	32. Applied Accountancy	16. Managerial Accountancy