

**Nepal Engineering College**  
**Affiliated to Pokhara University**  
**Department of Computer Science and Engineering**  
**Curriculum structure of BE COMPUTER**

S. N.	Course Code	Subject	Credit	L	T	P
<b>Year</b>	<b>I</b>	<b>Semester I</b>				
1	MTH	Calculus I	3	3	2	0
2	ELX	Digital Logic	3	3	1	2
3	CMP	Programming in C	3	3	1	3
4	ELE 110	Basic Electrical Engineering	3	3	1	2
5	CMP	Computer Workshop	1	0	0	3
6	ENG	Communication Technique	2	2	1	0
7	ELX 211	Electronics Devices and Circuits	3	3	1	2
		<b>Sub-total</b>	<b>18</b>	<b>17</b>	<b>7</b>	<b>12</b>
<b>Year</b>	<b>I</b>	<b>Semester II</b>				
1	MTH	Algebra and Geometry	3	3	2	0
2	PHY	Applied Physics	3	3	1	2
3	CHM	Applied Chemistry	2	2	1	2
4	MEC	Basic Engineering Drawing	1	0	0	3
5	CMP 115	Object Oriented Programming in C++	3	3	1	3
6	CMP 225	Data Structure and Algorithm	3	3	1	3
7	ELE	Instrumentation	3	3	1	2
		<b>Sub-total</b>	<b>18</b>	<b>17</b>	<b>7</b>	<b>15</b>
<b>Year</b>	<b>II</b>	<b>Semester III</b>				
1	MTH	Calculus II	3	3	2	0
2	CMP 226	Database Management System	3	3	1	3
3	CMP	Operating Systems	3	3	1	2
4	ELX	Microprocessor and Assembly Language Programming	3	3	1	2
5	CMP 241	Computer Graphics	3	3	1	2
6	CMM 340	Data Communication	3	3	1	2
		<b>Sub-total</b>	<b>18</b>	<b>18</b>	<b>7</b>	<b>11</b>
<b>Year</b>	<b>II</b>	<b>Semester IV</b>				

1	MTH	Applied Mathematics	3	3	2	0
2	MTH	Numerical Methods	2	2	1	2
3	CMP	Advanced Programming with Java	3	3	1	3
4	CMP 326	Theory of Computation	3	3	1	0
5	CMP 332	Computer Architecture	3	3	1	1
6		Research Fundamentals	2	2	0	2
		<b>Sub-total</b>	<b>16</b>	<b>16</b>	<b>6</b>	<b>8</b>
<b>Year</b>	<b>III</b>	<b>Semester V</b>				
1	MTH 220	Probability and Statistics	2	2	2	0
2	ELX	Embedded System	2	2	1	3
3	MGT	Engineering Management	2	2	1	0
4	CMP	Artificial Intelligence	3	3	1	3
5	CMM 442	Digital Signal Analysis and Processing	3	3	1	2
6	CMP	Software Engineering	3	3	1	2
		<b>Sub-total</b>	<b>15</b>	<b>15</b>	<b>7</b>	<b>10</b>
<b>Year</b>	<b>III</b>	<b>Semester VI</b>				
1	CMP 441	Image Processing and Pattern Recognition	3	3	1	2
2	CMP	Machine Learning	3	3	1	2
3	CMP	Compiler Design	2	2	2	2
4	CMP	Computer Networks	3	3	1	2
5	CMP	Simulation and Modeling	3	3	1	2
6		Elective I	3	3	1	2
7		Project I	1	0	0	2
		<b>Sub-total</b>	<b>18</b>	<b>17</b>	<b>7</b>	<b>14</b>
<b>Year</b>	<b>IV</b>	<b>Semester VII</b>				
1		Entrepreneurship and Professional Practice	2	2	1	0
2	ECO	Engineering Economics	3	3	1	0
3	CMP	Network and Cyber Security	3	3	1	2
4	CMP	Cloud Computing and Virtualization	3	3	1	2
5	CMP	Data Science and Analytics	3	3	1	2
6	CMP	Elective II	3	3	1	2

		<b>Sub-total</b>	<b>17</b>	<b>17</b>	<b>6</b>	<b>8</b>
<b>Year</b>	<b>IV</b>	<b>Semester VIII</b>				
<b>1</b>		<b>Elective III</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>2</b>		<b>Internship</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>3</b>		<b>Project II</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>
		<b>Sub-total</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>14</b>
		<b>Total Credits</b>	<b>129</b>			