

**RAFFLES UNIVERSITY, NEEMRANA**

**School of Engineering & Technology (SOE&T)**

**Department of Computer Science & Engineering**

**3<sup>rd</sup> Semester**

S. No.	Category	Code	Course Title	Hours Per Week			Credits	Marks			
				L	T	P		CIE	ESE	Total	
1	PCC	PCC-CSE-201	Data Structure & Algorithm using C	3	0	THEORY	3	40	60	100	
2	PCC	PCC-CSE-202	Object Oriented Programming through C++	3			3	40	60	100	
3	PCC	PCC-CSE-203	Database Management System	3	0		3	40	60	100	
4	PCC	PCC-CSE-204	Unix & Shell Programming	3	0		3	40	60	100	
5	BSC	BSC-201	Mathematics-III	3	0		3	40	60	100	
6	HSMC	HSMC-201	Human Values	2	0		2	40	60	100	
7	PCC	PCC-CSE-205	Data Structure & Algorithm using C Lab	PRACTICAL			2	1	60	40	100
8	PCC	PCC-CSE-206	Object Oriented Programming through C++ Lab				2	1	60	40	100
9	PCC	PCC-CSE-207	Database Management System Lab				2	1	60	40	100
10	PCC	PCC-CSE-209	Unix & Shell Programming Lab				2	1	60	40	100
<b>TOTAL</b>				<b>15</b>	<b>02</b>	<b>08</b>	<b>21</b>	<b>480</b>	<b>520</b>	<b>1000</b>	

\*CIE (Continues Internal Evaluation)

\*ESE (End Semester Exam)

**RAFFLES UNIVERSITY, NEEMRANA**

**School of Engineering & Technology (SOE&T)**

**Department of Computer Science & Engineering  
4<sup>th</sup> Semester**

S. No.	Category	Code	Course Title	Hours Per Week			Credits	Marks			
				L	T	P		CIE	ESE	Total	
1	PCC	PCC-CSE-209	Digital Electronics	2	1	THEORY	3	40	60	100	
2	PCC	PCC-CSE-210	Discrete Mathematics	3	0		3	40	60	100	
3	PCC	PCC-CSE-211	Computer Organization & Architecture	3	0		3	40	60	100	
4	PCC	PCC-CSE-212	Design & Analysis of Algorithm	2	1		3	40	60	100	
5	PCC	PCC-CSE-213	Operating Systems	2	1		3	40	60	100	
6	HSMC	HSMC-401	Organizational Behaviour	2	0		2	40	60	100	
7	MC	MC-III	Constitutional Law	2	0		2	40	60	100	
8	PCC	PCC-CSE-214	Computer Organization & Architecture Lab	PRACTICAL			2	1	60	40	100
9	PCC	PCC-CSE-215	Operating Systems Lab				2	1	60	40	100
10	PCC	PCC-CSE-216	Design & Analysis of Algorithm Lab				2	1	60	40	100
<b>TOTAL</b>				<b>16</b>	<b>03</b>	<b>06</b>	<b>22</b>	<b>460</b>	<b>540</b>	<b>1000</b>	

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**RAFFLES UNIVERSITY, NEEMRANA**

**School of Engineering & Technology (SOE&T)**

**Department of Computer Science & Engineering  
5<sup>th</sup> Semester**

S. No.	Category	Code	Course Title	Hours Per Week			Credits	Marks			
				L	T	P		CIE	ESE	Total	
1	PCC	PCC-CSE-301	Data Communication	2	1	THEORY	3	40	60	100	
2	PCC	PCC-CSE-302	Software Engineering	2	1		3	40	60	100	
3	PCC	PCC-CSE-303	Formal Language & Automata Theory	3	0		3	40	60	100	
4	PCC	PCC-CSE-304	Java Programming	2	1		3	40	60	100	
5	HSMC	HSMC-CSE-301	Human Resource Management	2	0		2	40	60	100	
6	PEC	PEC-CSE-301-303	Elective-I	2	0		2	40	60	100	
7	PCC	PCC-CSE-305	Software Engineering Lab	PRACTICAL			2	1	60	40	100
8	PCC	PCC-CSE-306	Java Programming Lab				2	1	60	40	100
9	PCC	PCC-CSE-307	Data Communication Lab				2	1	60	40	100
10	PROJ	PROJ-CSE-301	Industrial Training / Project Seminar				4	1	60	40	100
<b>TOTAL</b>				<b>13</b>	<b>03</b>	<b>10</b>	<b>20</b>	<b>480</b>	<b>520</b>	<b>1000</b>	

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\*ESE (End Semester Exam)

PROFESSIONAL ELECTIVE COURSE (PEC); Elective-I				
S. No.	Code	Course title	Preferred Semester	Credit
1	PEC-CSE 301	Soft Computing	V	3
2	PEC-CSE 302	Image Processing	V	3
3	PEC-CSE 303	Embedded System	V	3

**RAFFLES UNIVERSITY, NEEMRANA**

**School of Engineering & Technology (SOE&T)**

**Department of Computer Science & Engineering  
6<sup>th</sup> Semester**

S.No.	Category	Code	Course Title	Hours Per Week			Credits	Marks			
				L	T	P		CIE	ESE	Total	
1	PCC	PCC-CSE-308	Compiler Design	3	0	THEORY	3	40	60	100	
2	PCC	PCC-CSE-309	Data Mining & Ware-housing	3	0		3	40	60	100	
3	PCC	PCC-CSE-310	Computer Network	3	0		3	40	60	100	
4	PEC	PEC-CSE-304-306	Elective-II	2	1		3	40	60	100	
5	PEC	PEC-CSE-307-309	Elective-III	2	1		3	40	60	100	
6	OEC	OEC-CSE-301-303	Open Elective-I	2	1		3	40	60	100	
7	PCC	PCC-CSE-311	Compiler Design Lab	PRACTICAL			2	1	60	40	100
8	PCC	PCC-CSE-312	Computer Network Lab				2	1	60	40	100
9	PEC	PEC-CSE-310	Elective-III Lab				2	1	60	40	100
10	HSMC	HSMC-CSE-302	Aanandam				4	2	60	40	100
<b>TOTAL</b>				<b>15</b>	<b>03</b>	<b>08</b>	<b>23</b>	<b>480</b>	<b>520</b>	<b>1000</b>	

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<b>PROFESSIONAL ELECTIVE COURSE (PEC); Elective-II</b>				
S. No.	Code	Course title	Preferred Semester	Credit
1	PEC-CSE-304	Distributed Systems	VI	3
2	PEC-CSE-305	Big Data Analytics	VI	3
3	PEC-CSE-306	Natural Language Processing	VI	3

<b>PROFESSIONAL ELECTIVE COURSE (PEC); Elective-III</b>				
S. No.	Code	Course title	Preferred Semester	Credit
1	PEC-CSE-307	Computer Graphics	VI	3
2	PEC-CSE-308	Real Time Systems	VI	3
3	PEC-CSE-309	Web and Internet Technology	VI	3

<b>OPEN ELECTIVE COURSE (OEC); Open Elective-I</b>				
S. No.	Code	Course title	Preferred Semester	Credit
1	OEC-CSE-301	Management of Employee Performance	VI	3
2	OEC-CSE-302	Cyber Laws and Ethics	VI	3
3	OEC-CSE-303	Non-Conventional Energy Sources	VI	3

**RAFFLES UNIVERSITY, NEEMRANA**

**School of Engineering & Technology (SOE&T)**

**Department of Computer Science & Engineering  
7<sup>th</sup> Semester**

S. No.	Category	Code	Course Title	Hours Per Week			Credits	Marks			
				L	T	P		CIE	ESE	Total	
1	PCC	PCC-CSE-401	Network security & Cryptography	3	0	THEORY	3	40	60	100	
2	PEC	PEC-CSE-401-403	Elective-IV	2	1		3	40	60	100	
3	PEC	PEC-CSE-404-406	Elective-V	2	1		3	40	60	100	
4	OEC	OEC-CSE-401-403	Open Elective-II	2	1		3	40	60	100	
5	PCC	PCC-CSE-401	Network security & Cryptography Lab	PRACTICAL			2	1	60	40	100
6	PEC	PEC-CSE-407	Elective-IV Lab				2	1	60	40	100
7	PROJ	PROJ-CSE-302	Industrial Training /Project Seminar				4	2	120	80	200
8	PROJ	PROJ-CSE-401	Minor Project-II				12	6	120	80	200
<b>TOTAL</b>				<b>09</b>	<b>03</b>	<b>20</b>	<b>22</b>	<b>520</b>	<b>480</b>	<b>1000</b>	

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\*ESE (End Semester Exam)

<b>PROFESSIONAL ELECTIVE COURSE (PEC); Elective-IV</b>				
S. No.	Code	Course title	Preferred Semester	Credit
1	PEC-CSE-401	Multimedia Technology	VII	3
2	PEC-CSE-402	Parallel and Distributed Algorithms	VII	3
3	PEC-CSE-403	Neural Networks and Deep Learning	VII	3

<b>PROFESSIONAL ELECTIVE COURSE (PEC); Elective-V</b>				
S. No.	Code	Course title	Preferred Semester	Credit
1	PEC-CSE-404	Introduction to Data Science	VII	3
2	PEC-CSE-405	Internet-of-Things	VII	3
3	PEC-CSE-406	Cloud Computing	VII	3

<b>OPEN ELECTIVE COURSE (OEC); Open Elective-II</b>				
S. No.	Code	Course title	Preferred Semester	Credit
1	OEC-CSE-401	Economics Polices in India	VII	3
2	OEC-CSE-402	Reliability and Maintenance Engineering	VII	3
3	OEC-CSE-403	Management Training and Development	VII	3

RAFFLES UNIVERSITY, NEEMRANA

School of Engineering & Technology (SOE&T)

Department of Computer Science & Engineering  
8<sup>th</sup> Semester

S. No.	Category	Code	Course Title	Hours Per Week			Credits	Marks			
				L	T	P		CIE	ESE	Total	
1	PCC	PEC-CSE-404	Artificial Intelligence & Expert systems	3	1	THEORY	4	40	60	100	
2	PEC	PEC-CSE-407-409	Elective-VI	3	1		4	40	60	100	
3	PCC	PCC-CSE-405	Artificial Intelligence & Expert systems Lab	PRACTICAL			4	2	60	40	100
4	SI	SI-CSE-401	Seminar				4	2	60	40	100
5	PROJ	PROJ-CSE-402	Major Project				16	8	360	240	600
<b>TOTAL</b>				<b>06</b>	<b>02</b>	<b>24</b>	<b>20</b>	<b>560</b>	<b>440</b>	<b>1000</b>	

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\*ESE (End Semester Exam)

PROFESSIONAL ELECTIVE COURSE (PEC); Elective-VI				
S. No.	Code	Course title	Preferred Semester	Credit
1	PEC-CSE-407	Optimization Techniques	VIII	3
2	PEC-CSE-408	Human Computer Interaction	VIII	3
3	PEC-CSE-409	Digital Signal Processing	VIII	3