

## Scheme Document for 2021 Batch onwards

### B. Tech. Computer Science and Engineering

Year	Semester	Course Code	Course Name	Type	L	T	P	Credits	
<b>FIRST YEAR</b>									
1 <sup>ST</sup>	1 <sup>ST</sup>	MAL 103	Calculus for Engineers	BS	3	1	0	4	
1 <sup>ST</sup>	1 <sup>ST</sup>	BEL 102	Elements of Electrical Engineering	ES	3	0	2	4	
1 <sup>ST</sup>	1 <sup>ST</sup>	BSL 101	Applied Sciences	BS	3	0	2	4	
1 <sup>ST</sup>	1 <sup>ST</sup>	CSL 101	Computer Programming	DC	3	0	2	4	
1 <sup>ST</sup>	1 <sup>ST</sup>	ECL 101	Electronics Devices and Circuits	DC	3	0	2	4	
1 <sup>ST</sup>	1 <sup>ST</sup>	SAP 101	Health, Sports & Safety	HU	0	0	2	0	
1 <sup>ST</sup>	1 <sup>ST</sup>	HUL 102	Environmental Studies	HU	2	0	0	2	
<b>Subtotal</b>						<b>17</b>	<b>1</b>	<b>10</b>	<b>22</b>
1 <sup>ST</sup>	2 <sup>nd</sup>	MAL 104	Matrices, Transform Techniques, and Differential Equations	BS	3	1	0	4	
1 <sup>ST</sup>	2 <sup>nd</sup>	ECL 102	Digital Electronics	DC	3	0	2	4	
1 <sup>ST</sup>	2 <sup>nd</sup>	CSL 102	Data Structures	DC	3	0	2	4	
1 <sup>ST</sup>	2 <sup>nd</sup>	CSL 103	Application Programming	DC	3	0	2	4	
1 <sup>ST</sup>	2 <sup>nd</sup>	HUL 101	Communication Skills	HU	2	0	2	3	
1 <sup>ST</sup>	2 <sup>nd</sup>	BEL 101	Mechanics & Graphics	ES	3	0	2	4	
<b>Subtotal</b>						<b>17</b>	<b>1</b>	<b>10</b>	<b>23</b>
<b>Total</b>								<b>45</b>	
<b>SECOND YEAR</b>									
2 <sup>nd</sup>	3 <sup>rd</sup>	MAL 201	Numerical Methods and Probability Theory	BS	3	1	0	4	
2 <sup>nd</sup>	3 <sup>rd</sup>	CSL 202	Introduction to Object Oriented Programming	DC	3	0	2	4	
2 <sup>nd</sup>	3 <sup>rd</sup>	CSL 203	Computer System Organisation	DC	3	0	0	3	
2 <sup>nd</sup>	4 <sup>th</sup>	CSL 210	Data Structures with Applications	DC	2	0	2	3	
2 <sup>nd</sup>	3 <sup>rd</sup>	CSP 201	IT Workshop-I	DC	0	0	4	2	
2 <sup>nd</sup>	3 <sup>rd</sup>	ECL 202	Microprocessors & Interfacing	DC	3	0	2	4	
<b>Subtotal</b>						<b>14</b>	<b>1</b>	<b>10</b>	<b>20</b>
2 <sup>nd</sup>	4 <sup>th</sup>	CSL 205	Design and Analysis of Algorithms	DC	3	0	2	4	
2 <sup>nd</sup>	4 <sup>th</sup>	CSL 206	Software Engineering	DC	3	0	0	3	
2 <sup>nd</sup>	4 <sup>th</sup>	CSL 207	Operating Systems	DC	3	0	2	4	

2 <sup>nd</sup>	4 <sup>th</sup>	CSL 208	Design Principles of Programming Languages	DC	3	0	2	4
2 <sup>nd</sup>	4 <sup>th</sup>	CSL 204	Discrete Maths and Graph Theory	DC	3	1	0	4
2 <sup>nd</sup>	4 <sup>th</sup>	CSP 202	IT Workshop-II	DC	0	0	4	2
<b>Subtotal</b>					<b>15</b>	<b>1</b>	<b>10</b>	<b>21</b>
<b>Total</b>								<b>41</b>
<b>THIRD YEAR</b>								
3 <sup>rd</sup>	5 <sup>th</sup>	CSL 301	Database Management Systems	DC	3	0	2	4
3 <sup>rd</sup>	5 <sup>th</sup>		Open Course - I	OC	3	0	0	3
3 <sup>rd</sup>	5 <sup>th</sup>	CSL 302	Computer Networks	DC	3	0	2	4
3 <sup>rd</sup>	5 <sup>th</sup>	CSL 303	Theory of Computation	DC	3	1	0	4
3 <sup>rd</sup>	5 <sup>th</sup>		Elective-I	DE	3	0	0	3
<b>Subtotal</b>					<b>15</b>	<b>1</b>	<b>4</b>	<b>18</b>
3 <sup>rd</sup>	6 <sup>th</sup>	CSL 304	Compilers	DC	3	0	2	4
3 <sup>rd</sup>	6 <sup>th</sup>	CSL 305	Cryptography and Network Security	DC	3	0	2	4
3 <sup>rd</sup>	6 <sup>th</sup>		Open course-II	OC	3	0	0	3
3 <sup>rd</sup>	6 <sup>th</sup>		Elective-II	DE	3	0	0	3
3 <sup>rd</sup>	6 <sup>th</sup>		Elective –III	DE	3	0	2	4
<b>Subtotal</b>					<b>15</b>	<b>0</b>	<b>6</b>	<b>18</b>
<b>Total</b>								<b>36</b>
<b>FINAL YEAR</b>								
4 <sup>th</sup>	7 <sup>th</sup>	CSD401	Project	DE	0	0	16	8
4 <sup>th</sup>	7 <sup>th</sup>		Elective-IV	DE	3	0	0/2	3/4
4 <sup>th</sup>	7 <sup>th</sup>		Elective-V	DE	3	0	0/2	3/4
4 <sup>th</sup>	7 <sup>th</sup>		Elective-VI	DE	3	0	0	3
4 <sup>th</sup>	7 <sup>th</sup>		Elective-VII	DE	3	0	0	3
4 <sup>th</sup>	7 <sup>th</sup>		Open Course III / MooC Course*	OC	3	0	0	3
				<b>OR</b>				
4 <sup>th</sup>	7 <sup>th</sup>	CSD402	Internship	DE	0	0	16	8
<b>Subtotal</b>					<b>15</b>	<b>0</b>	<b>16-20</b>	<b>23-25/8</b>
<b>Total</b>								<b>27</b>
4 <sup>th</sup>	8 <sup>th</sup>	CSD402	Internship	DE	0	0	16	8
				<b>OR</b>				
4 <sup>th</sup>	8 <sup>th</sup>	CSD401/ CSD403	Project / Internship - II	DE	0	0	16	8
4 <sup>th</sup>	8 <sup>th</sup>		Elective-IV	DE	3	0	0/2	3/4
4 <sup>th</sup>	8 <sup>th</sup>		Elective-V	DE	3	0	0/2	3/4
4 <sup>th</sup>	8 <sup>th</sup>		Elective-VI	DE	3	0	0	3
4 <sup>th</sup>	8 <sup>th</sup>		Elective-VII	DE	3	0	0	3

4 <sup>th</sup>	8 <sup>th</sup>		Open Course III / MooC Course*	OC	3	0	0	3
<b>Subtotal</b>					<b>15</b>	<b>0</b>	<b>16-20</b>	<b>8 / 23-25</b>
<b>Total</b>								<b>31-33</b>
<b>GRAND TOTAL</b>								<b>153-155</b>

<b>TYPE</b>	<b>CREDITS</b>
BS	16
ES	08
HU	05
OC	06+03*
DE	38/40
DC	77
<b>Total</b>	<b>153/155</b>