

# Bachelor of Critical Care Technology (B.CCT)

## Semester I

S. No.	Course Code	Course Title	(Hours)					Credits as per NCrf				
			L	T/C	P	J	Total	L	T	P	J	Total
1	BCCT101	Anatomy for Health Sciences	45	0	30	0	75	3	0	1	0	4
2	BCCT102	Physiology for Health Sciences	45	0	30	0	75	3	0	1	0	4
3	BCCT103	Biochemistry for Health Sciences	30	0	30	0	60	2	0	1	0	3
4	BCCT104	Microbiology for Health Sciences	30	0	30	0	60	2	0	1	0	3
5	BCCT105	Medical Terminologies	15	0	0	0	15	1	0	0	0	1
6	BCCT106	Professional Communication	0	0	30	0	30	0	0	1	0	1
7	BCCT107	Introduction to Critical Care	30	0	30	0	60	2	0	1	0	3
8	BCCT108	Computer Applications in Healthcare	0	0	30	0	30	0	0	1	0	1
<b>Total Credits</b>			<b>195</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>405</b>	<b>13</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>20</b>

Semester II												
S. No.	Course Code	Course Title	(Hours)					Credits as per NCrF				
			L	T/C	P	J	Total	L	T	P	J	Total
9	BCCT151	Pathology for Health Sciences	30	0	30	0	60	2	0	1	0	3
10	BCCT152	Applied Pharmacology	30	15	0	0	45	2	1	0	0	3
11	BCCT153	Cardio■Respiratory Physiology	45	0	0	0	45	3	0	0	0	3
12	BCCT154	Basics of Patient Care & Nursing Procedures	30	0	30	0	60	2	0	1	0	3
13	BCCT155	Patient Care, Ethics & Safety	30	0	0	0	30	2	0	0	0	2
14	BCCT156	Clinical Posting I (Ward/ICU Observation)	0	0	0	90	90	0	0	0	2	2
15	BCCT157	Environmental Studies	30	0	0	0	30	2	0	0	0	2
16	BCCT158	Constitution of India & Human Rights	30	0	0	0	30	2	0	0	0	2
<b>Total Credits</b>			<b>225</b>	<b>15</b>	<b>60</b>	<b>90</b>	<b>390</b>	<b>15</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>20</b>

Semester III												
S. No.	Course Code	Course Title	(Hours)					Credits as per NCrF				
			L	T/C	P	J	Total	L	T	P	J	Total
17	BCCT201	Medicine Relevant to Critical Care	45	0	0	0	45	3	0	0	0	3
18	BCCT202	ICU Monitoring Systems & Equipment	30	0	30	0	60	2	0	1	0	3
19	BCCT203	Mechanical Ventilation – I	30	0	30	0	60	2	0	1	0	3
20	BCCT204	Arterial Blood Gas & Acid–Base Balance	15	0	30	0	45	1	0	1	0	2
21	BCCT205	Medical Electronics & Biomedical Devices	30	0	30	0	60	2	0	1	0	3
22	BCCT206	Clinical Posting II (ICU – Basic Skills)	0	0	0	135	135	0	0	0	3	3
23	BCCT207	Public Health & Emergency Care	30	0	0	0	30	2	0	0	0	2
24	BCCT208	ICU Skills Extension	0	0	0	45	45	0	0	0	1	1
<b>Total Credits</b>			<b>180</b>	<b>0</b>	<b>120</b>	<b>180</b>	<b>480</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>20</b>

Semester IV												
S. No.	Course Code	Course Title	(Hours)					Credits as per NCrF				
			L	T/C	P	J	Total	L	T	P	J	Total
25	BCCT251	Research Methods & Biostatistics	30	15	30	0	75	2	1	1	0	4
26	BCCT252	Infection Control, QA & ICU Safety	30	0	0	0	30	2	0	0	0	2
27	BCCT253	Mechanical Ventilation – II	30	0	30	0	60	2	0	1	0	3
28	BCCT254	Hemodynamic Monitoring	30	0	30	0	60	2	0	1	0	3
29	BCCT255	Renal Replacement Therapy (Intro)	15	0	30	0	45	1	0	1	0	2
30	BCCT256	Clinical Posting III (ICU Intermediate)	0	0	0	135	135	0	0	0	3	3
31	BCCT257	Entrepreneurship & Healthcare Innovation	30	0	0	0	30	2	0	0	0	2
32	BCCT258	ICU Simulation Skills	0	0	30	0	30	0	0	1	0	1
<b>Total Credits</b>			<b>165</b>	<b>15</b>	<b>150</b>	<b>135</b>	<b>465</b>	<b>11</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>20</b>

Semester V												
S. No.	Course Code	Course Title	(Hours)					Credits as per NCrF				
			L	T/C	P	J	Total	L	T	P	J	Total
33	BCCT301	Advanced Mechanical Ventilation	30	0	30	0	60	2	0	1	0	3
34	BCCT302	Critical Care Cardiology & ECG	30	0	0	0	30	2	0	0	0	2
35	BCCT303	Neuro Critical Care	30	0	0	0	30	2	0	0	0	2
36	BCCT304	Emergency & Trauma Care	30	0	30	0	60	2	0	1	0	3
37	BCCT305	ICU Administration & Patient Relations	30	0	0	0	30	2	0	0	0	2
38	BCCT306	Clinical Posting IV (ICU Advanced)	0	0	0	180	180	0	0	0	4	4
39	BCCT307	Quality Improvement Project I	0	15	30	0	45	0	1	1	0	2
40	BCCT308	Case Conferences & IPE Rounds	0	15	30	0	45	0	1	1	0	2
<b>Total Credits</b>			<b>150</b>	<b>30</b>	<b>120</b>	<b>180</b>	<b>480</b>	<b>10</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>20</b>

Semester VI												
S. No.	Course Code	Course Title	(Hours)					Credits as per NCrF				
			L	T/C	P	J	Total	L	T	P	J	Total
41	BCCT351	Applied Critical Care (Case Seminars)	15	15	0	0	30	1	1	0	0	2
42	BCCT352	Critical Care Capstone Project	0	15	90	0	105	0	1	3	0	4
43	BCCT353	ICU Laws, Ethics & Accreditation	15	0	0	0	15	1	0	0	0	1
44	BCCT354	Elective (Neonatal / Cardiac / Neuro ICU)	30	0	30	0	60	2	0	1	0	3
45	BCCT355	Clinical Posting V (ICU + Emergency)	0	0	0	180	180	0	0	0	4	4
46	BCCT356	Open Elective	30	0	0	0	30	2	0	0	0	2
47	BCCT357	ICU Simulation Bootcamp & Portfolio	0	0	0	90	90	0	0	0	2	2
48	BCCT358	Research Dissemination (Seminar/Manuscript)	0	15	30	0	45	0	1	1	0	2
<b>Total Credits</b>			<b>90</b>	<b>45</b>	<b>150</b>	<b>270</b>	<b>555</b>	<b>6</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>20</b>

Year IV Apprenticeship												
S. No.	Course Code	Course Title	(Hours)					Credits as per NCrF				
			L	T/C	P	J	Total	L	T	P	J	Total
49	BCCT401	Medical ICU	0	0	0	180	180	0	0	0	4	4
50	BCCT402	Surgical / Trauma ICU	0	0	0	180	180	0	0	0	4	4
51	BCCT403	Ventilator & Respiratory Care	0	0	0	180	180	0	0	0	4	4
52	BCCT404	Cardiac ICU / CCU	0	0	0	180	180	0	0	0	4	4
53	BCCT405	Neuro / Neonatal ICU	0	0	0	180	180	0	0	0	4	4
54	BCCT406	ICU QA, Infection Control & Safety	0	0	0	180	180	0	0	0	4	4
55	BCCT407	Patient Communication, Ethics & Documentation	0	30	0	90	120	0	2	0	2	4
56	BCCT408	Work-Embedded Research / QI Project	0	30	90	0	120	0	2	3	0	5
57	BCCT409	Apprenticeship Portfolio & Viva	0	30	60	0	90	0	2	2	0	4
58	BCCT410	Elective - German/ French/ English/ Japanese	30	0	30	0	60	2	0	1	0	3
<b>Total Credits</b>			<b>30</b>	<b>90</b>	<b>180</b>	<b>1170</b>	<b>1470</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>26</b>	<b>40</b>

		<b>Grand Total</b>	<b>1035</b>	<b>195</b>	<b>990</b>	<b>2025</b>	<b>4245</b>	<b>69</b>	<b>13</b>	<b>33</b>	<b>45</b>	<b>160</b>
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L = Lecture | T/C = Tutorial/Clinical | P = Practical | J = Journal/Fieldwork | Credits computed as per NCrF formula