



**University of Engineering & Management, Kolkata**

**Syllabus for B.Tech. in Electrical and Electronics Engineering**

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

<b>A.THEORY</b>							
<b>Sl No.</b>	<b>Subject Code</b>	<b>Theory</b>	<b>Contact Hours/Week</b>				<b>Credit Points</b>
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Total</b>	
1	M (CS)301	Numerical Methods	2	1	0	3	2
2	M302	Mathematics-III	3	1	0	4	4
3	EC(EE)301	Analog Electronic Circuits	3	0	0	3	3
4	EC(EE)302	Digital Electronic circuit	3	0	0	3	3
5	EE301	Electric Circuit Theory	3	1	0	4	4
6	EE302	Field theory	3	1	0	4	4
7	GS301	Essential Studies for Professionals III	3	1	0	4	2
<b>Total of Theory</b>						<b>25</b>	<b>22</b>
<b>B. PRACTICAL</b>							
8	EC(EE)391	Analog & Digital Electronic Circuit	0	0	3	3	2
9	M (CS)391	Numerical Methods Lab	0	0	2	2	1
10	EE391	Electric Circuit Theory Lab	0	0	3	3	2
11	HU391	Technical Report writing and Language	0	0	3	3	2
<b>Total of Practical</b>						<b>11</b>	<b>7</b>
<b>C. SESSIONAL</b>							
12	GS381	Skill Development for Professionals - III	2	1	0	3	1
<b>Total of Sessional</b>						<b>3</b>	<b>1</b>
<b>Total of Semester</b>						<b>39</b>	<b>30</b>

## EEE 4<sup>th</sup> Semester

<b>A.THEORY</b>							
Sl No.	Subject Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	HU401	Values & Ethics in Profession	3	0	0	3	3
2	EI(EEE)401	Transducers& Sensors	3	0	0	3	3
3	CH401	Basic Environmental Engineering & Elementary Biology	3	0	0	3	3
4	EE401	Electric Machine-I	3	1	0	4	4
5	EE402	Electrical & Electronic Measurement	3	1	0	4	3
6	EE403	Computer Organisation& Architecture	3	1	0	4	4
7	GS401	Essential Studies for Professionals IV	3	1	0	4	2
<b>Total of Theory</b>						<b>25</b>	<b>22</b>
<b>B. PRACTICAL</b>							
8	EI(EEE) 491	Transducers& Sensors Lab	0	0	3	3	2
9	EE491	Electric Machine-I Lab	0	0	3	3	2
10	EE492	Electrical & Electronic Measurement Lab	0	0	3	3	2
11	EE493	Computer Organisation& Architecture Lab	0	0	3	3	2
<b>Total of Practical</b>						<b>12</b>	<b>8</b>
<b>C. SESSIONAL</b>							
12	GS481	Skill Development for Professionals -IV	2	1	0	3	1
<b>Total of Sessional</b>						<b>3</b>	<b>1</b>
<b>Total of Semester</b>						<b>40</b>	<b>31</b>

## EEE 5<sup>th</sup> Semester

<b>A.THEORY</b>							
Sl No.	Subject Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	HU501	Economics for Engineers	3	0	0	3	3
2	EEE501	Electric machine-II	3	1	0	4	4
3	EEE502	Power system-I	3	1	0	4	4
4	EEE503	Signals & Systems	3	1	0	4	4
5	EEE504A EEE504B	DataBase Management Systems Operating System	3	0	0	3	3
6	GS501	Essential Studies for Professionals-V	3	1	0	4	2
<b>Total of Theory</b>						<b>22</b>	<b>20</b>
<b>B.PRACTICAL</b>							
7	EEE-591	Electric machine-II	0	0	3	3	2
8	EEE-593	Signals & Systems	0	0	3	3	2
9	EEE-594A EEE-594B	DataBase Management Systems Lab Operating System Lab	0	0	3	3	2
10	EEE-581	Seminar	0	0	3	3	2
<b>Total of Practical</b>						<b>12</b>	<b>8</b>
<b>C. SESSIONAL</b>							
11	GS-581	Skill Development for Professionals - V	2	1	0	3	1
<b>Total of Sessional</b>						<b>3</b>	<b>1</b>
<b>Total of Semester</b>						<b>37</b>	<b>29</b>

## EEE 6<sup>th</sup> Semester

<b>A.THEORY</b>							
Sl No.	Subject Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	HU601	Principles of Management	2	0	0	2	2
2	EEE601	Power System-II	3	1	0	4	4
3	EEE602	Control System	3	1	0	4	4
4	EEE603	Digital Signal Processing	3	1	0	4	4
5	EEE604A EEE604B EEE604C	Software Engineering Microprocessor & microcontroller. Object Oriented Programming Using JAVA	3	0	0	3	3
6	CS605A EEE605B	Data Science & Data Analytics Power Plant Engineering	3	0	0	3	3
7	GS 601	Essential Studies for Professionals VI	3	1	0	4	2
<b>Total of Theory</b>						<b>24</b>	<b>22</b>
<b>B. PRACTICAL</b>							
8	EEE691	Power System Lab	0	0	3	3	2
9	EEE692	Control System Lab	0	0	3	3	2
10	EEE693	Digital Signal Processing Lab	0	0	3	3	2
11	EEE694A EEE694B EEE694C	Software Engineering Lab Microprocessor & microcontroller Lab Object Oriented Programming using JAVA lab	0	0	3	3	2
12	CS695A	Data Science & Data Analytics Lab	0	0	3	3	2
<b>Total of Practical</b>						<b>15</b>	<b>10</b>
<b>C. SESSIONAL</b>							
12	GS681	Skill Development for Professionals - VI	2	1	0	3	1
<b>Total of Sessional</b>						<b>3</b>	<b>1</b>
<b>Total of Semester</b>						<b>42</b>	<b>33</b>

## EEE 7<sup>th</sup> Semester

<b>A.THEORY</b>							
Sl No.	Subject Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	EEE701	VLSI Design	3	1	0	4	4
2	EEE702	Communication Engineering	3	1	0	4	4
3	EEE703	Power Electronics	3	1	0	4	4
4	EEE704A EEE704B EEE704C  EEE704D	Electric Drive Utilization of Electric Power Power Plant Instrumentation & Control Digital Communication and network	3	0	0	3	3
5	EEE705A EEE705B EEE705C	Digital Image Processing Bio medical instrumentation. Non-conventional Energy	3	0	0	3	3
6	EEE706A EEE706B EEE706C	Design & Analysis of Algorithm Mechatronics AI & Soft Computing	3	0	0	3	3
7	GS701	Essential Studies for Professionals VII	3	1	0	4	2
<b>Total of Theory</b>						<b>25</b>	<b>23</b>
<b>B.PRACTICAL</b>							
8	EEE791	VLSI design Lab	0	0	3	3	2
9	EEE792	Digital Communication	0	0	3	3	2
10	EEE793A EEE793B EEE794C	Design & Analysis of Algorithm Lab Mechatronics Lab AI& Soft Computing Lab	0	0	3	3	2
11	EEE781	Design of Electrical /Electronic Systems	0	0	3	3	2
12	EEE782	Seminar on Industrial Training.	0	0	3	3	2
13	EEE795	Project part-I	0	0	3	3	2
<b>Total of Practical</b>						<b>18</b>	<b>10</b>
<b>C. SESSIONAL</b>							
14	GS781	Skill Development for Professionals - VII	2	1	0	3	1
<b>Total of Sessional</b>						<b>3</b>	<b>1</b>
<b>Total of Semester</b>						<b>46</b>	<b>34</b>

## EEE 8<sup>th</sup> Semester

<b>A.THEORY</b>							
Sl No.	Subject Code	Theory	Contact Hours/Week				Credit Points
			L	T	P	Total	
1	HU801A	Organizational Behaviour	2	0	0	2	2
2	EEE801A EEE801B EEE801C EEE801D	High Voltage Engineering Illumination Engineering Energy Management& Audit FACTS&HVDC transmission	3	0	0	3	3
3	EEE-802A EEE-802B EEE-802C EEE-802D	Network Security Operation Research Cloud Computing Mobile Computing	3	0	0	3	3
4	GS 801	Essential Studies for Professionals VIII	3	1	0	4	2
<b>Total of Theory</b>						<b>12</b>	<b>10</b>
<b>B.PRACTICAL</b>							
5	EEE881	Project-II	0	0	12	12	6
6	EEE882	Electrical Systems Laboratory-II	0	0	6	6	4
7	EEE883	Grand Viva					3
<b>Total of Practical</b>						<b>18</b>	<b>13</b>
<b>C. SESSIONAL</b>							
8	GS881	Skill Development for Professionals - VIII	2	1	0	3	1
<b>Total of Sessional</b>						<b>3</b>	<b>1</b>
<b>Total of Semester</b>						<b>33</b>	<b>24</b>