



**E.G.S. PILLAY ENGINEERING COLLEGE**  
(An Autonomous Institution, Affiliated to Anna University, Chennai)  
Nagore Post, Nagapattinam – 611 002, Tamilnadu.

**B.E. – Electrical and Electronics Engineering**

Total Credits to be earned by regular students: 188  
Total Credits to be earned by lateral entry students: 144

**R2017**

**Full Time Curriculum and Syllabus**

SEMESTER I									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>Theory Course</b>									
1701MA101	Engineering Mathematics-I	3	2	0	4	40	60	100	BS
1701PH101	Applied Physics for Engineers	3	0	0	3	40	60	100	BS
1701CH104	Applied Chemistry	3	0	0	3	40	60	100	BS
1701EN101	Technical English	3	0	0	3	100	0	100	HSS
1701GE103	Basic Mechanical Engineering	3	0	0	3	40	60	100	ES
1701GE102	Basic Civil Engineering	3	0	0	3	40	60	100	ES
<b>Laboratory Course</b>									
1701GEX53	Workshop Practice	0	0	2	1	50	50	100	ES
1701HS151	Physics and Chemistry Laboratory –I	0	0	2	1	50	50	100	BS
1701GEX52	Communication Skills Laboratory	0	0	2	1	50	50	100	HSS
<b>Total</b>		<b>18</b>	<b>2</b>	<b>6</b>	<b>22</b>	<b>450</b>	<b>450</b>	<b>900</b>	

SEMESTER II									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>Theory Course</b>									
1701MA201	Engineering Mathematics-II	3	2	0	4	40	60	100	BS
1701PH202	Semiconductor Physics and Devices	3	0	0	3	40	60	100	BS
1701CH201	Environmental Studies	3	0	0	3	40	60	100	BS
1701LE201/ 1701LE202	Communicative English (Language Elective)/ Hindi (Language Elective)	3	0	0	3	100	0	100	HSS
1702EE201	Electric Circuit Analysis	3	2	0	4	40	60	100	PC
1701GEX03	Programming in C	3	0	0	3	40	60	100	ES
1701GEX02	Engineering Graphics	2	2	0	3	50	50	100	ES
<b>Laboratory Course</b>									
1701HS251	Physics and Chemistry Laboratory –II	0	0	2	1	50	50	100	BS
1701GEX51	Programming in C Laboratory	0	0	2	1	50	50	100	ES
<b>Total</b>		<b>20</b>	<b>6</b>	<b>4</b>	<b>25</b>	<b>450</b>	<b>450</b>	<b>900</b>	

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SEMESTER III										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		
<b>Theory Course</b>										
1701MA301	Engineering Mathematics-III	3	2	0	4	40	60	100	BS	
1702EE301	Electron Devices and Circuits	3	0	0	3	40	60	100	PC	
1702EE302	Digital Electronics	3	0	0	3	40	60	100	PC	
1702EE303	Electromagnetic Theory	3	2	0	4	40	60	100	PC	
1702EE304	Power Plant Engineering	3	0	0	3	40	60	100	PC	
1702EE305	Electrical Machinery-I	3	0	0	3	40	60	100	PC	
<b>Laboratory Course</b>										
1702EE351	Electrical Machinery Laboratory-I	0	0	4	2	50	50	100	PC	
1702EE352	Electron Devices and Circuits Laboratory	0	0	2	1	50	50	100	PC	
1704EE353	Technical seminar-I	0	0	2	1	100	0	100	EEC	
1704GE351	Life Skills: Soft Skills	0	0	2	1	100	0	100	EEC	
<b>Total</b>		<b>18</b>	<b>4</b>	<b>10</b>	<b>25</b>	<b>540</b>	<b>460</b>	<b>1000</b>		

SEMESTER IV										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		
<b>Theory Course</b>										
1701MA403	Numerical Methods and Statistics	3	2	0	4	40	60	100	BS	
1702EE401	Measurements and Instrumentation	3	0	0	3	40	60	100	PC	
1702EE402	Linear Integrated Circuits	3	0	0	3	40	60	100	PC	
1702EE403	Transmission and Distribution	3	2	0	4	40	60	100	PC	
1702EE404	Electrical Machinery-II	3	0	0	3	40	60	100	PC	
1702EC406	Communication Engineering	3	0	0	3	40	60	100	PC	
1701CH201*	Environmental Studies*	3*	0	0	3*	40	60	100	BS	
<b>Laboratory Course</b>										
1702EE451	Electrical Machinery Laboratory-II	0	0	4	2	50	50	100	PC	
1702EE452	Analog and Digital Integrated Circuits Laboratory	0	0	2	1	50	50	100	PC	
1704EE453	Technical Seminar-II	0	0	2	1	100	0	100	EEC	
1704GE451	Life Skills: Verbal Ability	0	0	2	1	100	0	100	EEC	
<b>Total</b>		<b>18</b>	<b>4</b>	<b>10</b>	<b>25</b>	<b>540</b>	<b>460</b>	<b>1000</b>		

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\*Only for lateral entry students –Total Credits -28

SEMESTER V									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>Theory Course</b>									
1702EE501	Electrical Machine Design	3	2	0	4	40	60	100	PC
1702EE502	Linear Control Systems	3	2	0	4	40	60	100	PC
<del>1702EE503</del>	<del>Power Electronics</del>	<del>3</del>	<del>0</del>	<del>0</del>	<del>3</del>	<del>40</del>	<del>60</del>	<del>100</del>	<del>PC</del>
	Elective-I	3	0	0	3	40	60	100	PE
	Elective-II	3	0	0	3	40	60	100	PE
1702CS504	Object Oriented Programming	3	0	0	3	40	60	100	PC
<b>Laboratory Course</b>									
1702CS554	Object Oriented Programming Laboratory	0	0	2	1	50	50	100	PC
<del>1702EE551</del>	<del>Measurement and Control Laboratory</del>	<del>0</del>	<del>0</del>	<del>2</del>	<del>1</del>	<del>50</del>	<del>50</del>	<del>100</del>	<del>PC</del>
1704EE552	Mini Project - I	0	0	2	1	100	0	100	EEC
1704GE551	Life Skills: Aptitude-I	0	0	2	1	100	0	100	EEC
<b>Total</b>		<b>18</b>	<b>4</b>	<b>8</b>	<b>24</b>	<b>540</b>	<b>460</b>	<b>1000</b>	

SEMESTER VI									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>Theory Course</b>									
1701MGX02	Industrial Economics	3	0	0	3	40	60	100	HSS
1702EE601	Solid State Drives	3	0	0	3	40	60	100	PC
1702EE602	Power System Analysis	3	2	0	4	40	60	100	PC
1702EE603	Microprocessor, Microcontroller and its Applications	3	0	0	3	40	60	100	PC
	Elective-III	3	0	0	3	40	60	100	PE
	Elective-IV (Open Elective)	3	0	0	3	40	60	100	PE
<b>Laboratory Course</b>									
1702EE651	Power Electronics and Drives Laboratory	0	0	4	2	50	50	100	PC
1702EE652	Microprocessor, Microcontroller and its Applications Laboratory	0	0	2	1	50	50	100	PC
1704EE653	Mini Project-II	0	0	2	1	100	0	100	EEC
1704GE651	Life Skills:Aptitude-II	0	0	2	1	100	0	100	EEC
1704EE654	Industrial Visit Presentation	0	0	0	1	100	0	100	EEC
<b>Total</b>		<b>18</b>	<b>2</b>	<b>10</b>	<b>25</b>	<b>640</b>	<b>460</b>	<b>1100</b>	

ATTESTED



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SEMESTER VII									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>Theory Course</b>									
1701MGX01	Professional Ethics	3	0	0	3	40	60	100	HSS
1702EE701	Protection and Switchgear	3	0	0	3	40	60	100	PC
1702EE702	Power System Operation and Control	3	0	0	3	40	60	100	PC
1702EE703	High Voltage Engineering	3	0	0	3	40	60	100	PC
	Elective-V	3	0	0	3	40	60	100	PE
	Elective-VI (Open Elective)]	3	0	0	3	40	60	100	PE
<b>Laboratory Course</b>									
1702EE751	Power System Simulation Laboratory	0	0	2	1	50	50	100	PC
1702EE752	Computer Aided Electrical Drawing Laboratory	0	0	2	1	50	50	100	PC
<del>1704EE753</del>	<del>Mini Project-III</del>	<del>0</del>	<del>0</del>	<del>2</del>	<del>1</del>	<del>100</del>	<del>0</del>	<del>100</del>	<del>EEC</del>
1704GE751	Life Skills: Competitive Exams Preparation	2	0	0	2	100	0	100	EEC
1704EE754	Implant / Internship Training Presentation	0	0	0	1	100	0	100	EEC
<b>Total</b>		<b>7</b>	<b>0</b>	<b>6</b>	<b>24</b>	<b>540</b>	<b>460</b>	<b>1100</b>	
		<b>0</b>	<b>0</b>	<b>6</b>	<b>24</b>	<b>540</b>	<b>460</b>	<b>1100</b>	

SEMESTER VIII									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>Theory Course</b>									
	Elective-VII	3	0	0	3	40	60	100	PE
	Elective-VIII	3	0	0	3	40	60	100	PE
	Elective-IX	3	0	0	3	40	60	100	PE
<b>Laboratory Course</b>									
1704EE851	Project Work	0	0	18	9	50	50	100	EEC
<b>Total</b>		<b>9</b>	<b>0</b>	<b>18</b>	<b>18</b>	<b>170</b>	<b>230</b>	<b>400</b>	

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**List of Electives for / offered by B.E. – Electrical and Electronics Engineering**

Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
<b>ELECTIVES I &amp; II</b>									
1703EE001	Special Electrical Machines	3	0	0	3	40	60	100	PE
1703EE002	Electrical Safety and Management	3	0	0	3	40	60	100	PE
1703EE003	Digital System Design using VHDL	3	0	0	3	40	60	100	PE
1703MG002	Total Quality Management	3	0	0	3	40	60	100	PE
1703EE004	Bio-Medical Instrumentation	3	0	0	3	40	60	100	PE
<b>ELECTIVES III &amp; IV</b>									
1703EE005	Power System Stability	3	0	0	3	40	60	100	PE
1703EE006	Digital Signal Processing	3	0	0	3	40	60	100	PE
1703EE007	Advanced Control Systems	3	0	0	3	40	60	100	PE
1703EE008	Field Programmable Gate Array	3	0	0	3	40	60	100	PE
1703EE009	Power System Transients	3	0	0	3	40	60	100	PE
1703CS023	Soft Computing	3	0	0	3	40	60	100	PE
<b>ELECTIVES V &amp; VI</b>									
1703EE010	Electric and Hybrid Vehicles	3	0	0	3	40	60	100	PE
1703EE011	Micro and Smart Grid	3	0	0	3	40	60	100	PE
1703EE012	Power System Restructuring and Deregulation	3	0	0	3	40	60	100	PE
1703EE013	Power Quality	3	0	0	3	40	60	100	PE
1703EE014	High Voltage DC Transmission	3	0	0	3	40	60	100	PE
1703EE015	Embedded Systems Design	3	0	0	3	40	60	100	PE
1703EE016	Nano technology	3	0	0	3	40	60	100	PE
<b>ELECTIVES VII, VIII &amp; IX</b>									
1703EE017	Flexible AC Transmission Systems	3	0	0	3	40	60	100	PE
1703EE018	Power Electronics for Renewable Energy Systems	3	0	0	3	40	60	100	PE
1703EE019	Electrical Energy Generation Utilization and Conservation	3	0	0	3	40	60	100	PE
1703EE020	Digital Control Systems	3	0	0	3	40	60	100	PE
1703EE021	Optimization Techniques	3	0	0	3	40	60	100	PE
1703EE022	Advanced Insulation Systems	3	0	0	3	40	60	100	PE
1703EE023	Power Electronics Applications to Power Systems	3	0	0	3	40	60	100	PE
1703ME037	Industrial Plastics and Polymers	3	0	0	3	40	60	100	PE
1703ME038	Industrial Automation	3	0	0	3	40	60	100	PE
1703ME039	Product Design Engineering	3	0	0	3	40	60	100	PE

*(Signature)*  
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OPEN ELECTIVES										
1703EE002	Electrical Safety and Management	3	0	0	3	40	60	100	OE	
1703EE010	Electric and Hybrid Vehicles	3	0	0	3	40	60	100	OE	
1703ME038	Industrial Automation	3	0	0	3	40	60	100	OE	
1703EE024	Renewable Energy Sources	3	0	0	3	40	60	100	OE	
1703EE025	Industrial Drives and Control	3	0	0	3	40	60	100	OE	
ENTREPRENEURSHIP ELECTIVES										
1703ED001	Startup Entrepreneurship	3	0	0	3	100	00	100	EE	
1703ED002	Design Thinking for Innovation	3	0	0	3	100	00	100	EE	

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