

**CURRICULUM – 2009
(C-09)**

**DIPLOMA IN
APPLIED ELECTRONICS AND
INSTRUMENTATION ENGINEERING**



**State Board of Technical Education & Training
Andhra Pradesh:: Hyderabad**

**DIPLOMA IN APPLIED ELECTRONICS AND INSTRUMENTATION
ENGINEERING
SCHEME OF INSTRUCTIONS AND EXAMINATION
CURRICULUM-2009
(FIRST YEAR)**

Sub Code	Name of the Subject	Instruction Periods/Week		Total Periods Per Year	Scheme Of Examinations			
		Theory	Practicals		Duration (hrs)	Sessional Marks	End Exam Marks	Total Marks
THEORY SUBJECTS								
AEI-101	English	2	-	60	3	20	80	100
AEI - 102	Engineering Mathematics - I	5	-	150	3	20	80	100
AEI - 103	Engineering Physics	4	-	120	3	20	80	100
AEI - 104	Engineering Chemistry and Environmental Studies	4	-	120	3	20	80	100
AEI - 105	Electronic Components and Devices	5	-	150	3	20	80	100
PRACTICAL SUBJECTS								
AEI - 106	Basic Electronics Lab	-	6	180	3	40	60	100
AEI - 107	Engineering Drawing	-	6	180	3	40	60	100
AEI-108	Physics Laboratory	-	3	90	3	20	30	50
AEI - 109	Chemistry Laboratory	-			3	20	30	50
AEI - 110	Information Technology Lab	-	4	120	3	40	60	100
-	Group Task / Seminar	-	3	90	-	-	-	-
Total		20	22	1260	-	260	640	900

**DIPLOMA IN APPLIED ELECTRONICS AND INSTRUMENTATION
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CURRICULUM-2009
(III Semester)**

Sub Code	Name of the Subject	Instruction Periods/Week		Total Periods Per Semester	Scheme Of Examinations			
		Theory	Practicals		Duration (hrs)	Sessional Marks	End Exam Marks	Total Marks
THEORY SUBJECTS								
AEI-301	Engineering Mathematics –II	4	-	60	3	20	80	100
AEI -302	Electronic Circuits	5	-	75	3	20	80	100
AEI -303	Basic Electrical Engg.	5	-	75	3	20	80	100
AEI -304	Digital Electronics	4	-	60	3	20	80	100
AEI -305	Process Instrumentation	6	-	90	3	20	80	100
PRACTICAL SUBJECTS								
AEI -306	Electronic Circuits Lab	-	6	90	3	40	60	100
AEI -307	Digital Electronics Lab	-	3	45	3	40	60	100
AEI-308	Process Instrumentation Lab	-	3	45	3	40	60	100
AEI -309	English Communication lab level-1	-	3	45	3	20	30	50
	Seminar / Group discussion	-	3	45	-	-	-	-
	Total	24	18	630	-	240	610	850

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CURRICULUM-2009**

(IV Semester)

Sub Code	Name of the Subject	Instruction Periods/Week		Total Periods Per Semester	Scheme Of Examinations			
		Theory	Practicals		Duration (hrs)	Sessional Marks	End Exam Marks	Total Marks
THEORY SUBJECTS								
AEI-401	Electronic Measuring instruments	5	-	75	3	20	80	100
AEI -402	Microcontrollers & Its Applications	5	-	75	3	20	80	100
AEI -403	Industrial Electronics & Control Engg.	5	-	75	3	20	80	100
AEI -404	Chemical & Analytical Instrumentation	5	-	75	3	20	80	100
AEI -405	Process Control	5	-	75	3	20	80	100
PRACTICAL SUBJECTS								
AEI -406	Electronic Measuring Instruments Lab	-	3	45	3	40	60	100
AEI -407	Chemical & Analytical Instrumentation Lab	-	3	45	3	40	60	100
AEI-408	Process Control lab	-	3	45	3	40	60	100
AEI -409	Microcontroller lab	-	3	45	3	40	60	100
AEI -410	English Communication Lab Level - II	-	3	45	3	20	30	50
-	Group Task / Seminar	-	2	30	-	-	-	-
	Total	25	17	630	-	280	670	950

AEI-501 INDUSTRIAL TRAINING

(Practical Training)

V SEMESTER

S.NO	Subject	Duration	Items	Max Marks	Remarks
1	Practical Training in the Industry	6 Months	1.First Assessment (at the end of 2nd month)	200	
			2. Second Assessment (at the end of 4 th month)	200	
			3.Final Assessment (at the end of spell)	200	
			4. Log Book & Record	100	50 Marks Each
			5. Seminar	50	
TOTAL PER SEMESTER				750	

The industrial training shall carry 750 marks and pass marks is **50%**.A candidate failing to secure the minimum marks should complete it at his own expenses.

During Industrial training the candidate shall put in a minimum of 90%attendance.

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(VI Semester)

Sub Code	Name of the Subject	Instruction Periods/Week		Total Periods Per Semester	Scheme Of Examinations			
		Theory	Pract-icals		Duration (hrs)	Sessional Marks	End Exam Marks	Total Marks
THEORY SUBJECTS								
*AEI-601	*Industrial Management and Entrepreneurship	5	-	75	3	20	80	100
AEI -602	Bio medical Instrumentation	5	-	75	3	20	80	100
AEI 603	Industrial Automation	5	-	75	3	20	80	100
AEI -604	Principles of communications & Linear IC applications	5	-	75	3	20	80	100
AEI -605	ELECTIVES	5	-	75	3	20	80	100
	(A) Power Electronics							
	(B) Power plant Instrumentation							
PRACTICAL SUBJECTS								
AEI -606	PLC & SCADA Lab	-	6	90	3	40	60	100
AEI -607	Biomedical Instrumentation Lab	-	3	45	3	40	60	100
AEI -608	Communications & LIC Lab	-	3	45	3	40	60	100
AEI -609	English Communication skills Laboratory Level - III		2	30	3	20	30	50
	Group Task / Seminar	-	3	45	-	-	-	-
	Total	25	17	630	-	240	610	850

*Common with ECE