

**KANNUR UNIVERSITY**  
**Part-Time B-Tech (Engineering) Degree Course Regulations.**  
**(With effect from 2007 Admissions)**

**1. ELIGIBILITY OF ADMISSION TO THE PART- TIME B-Tech. (ENGINEERING) DEGREE PROGRAMME.**

- (a) Candidates shall be an Indian National employed in the state of Kerala.
- (b) Candidate shall have passed the Diploma Examination in Engineering after undergoing regular institutional course of three years.
- (c) Candidates shall be in professional employment at the time of applying for the course. They shall have two years experience at the time of applying after passing the Diploma Examination in any of the following types of establishments.
  - (i) Government organisations.
  - (ii) Quasi – Government Organisations
  - (iii) Public or Private limited Companies registered under companies act.
  - (iv) Private- aided Polytechnics, Private – aided and un–aided Engineering Colleges in the State.

Note: - (a) Employment for a period of less than 6 months will not be considered as experience.

(b) One year Apprenticeship training under Apprentices act will be taken in lieu of experience, on production of certificate issued by the head of the organisation.

**1.2. EQUIVALENCY OF BRANCHES**

Candidates will be admitted only to the branch of Engineering in which they have obtained the Diploma. However certain branches of Diploma are considered equivalent to certain branches for admission to the Part- Time B-Tech. Courses, for details refer G.O. (Rt.) No.1182 /06 / H.Edn. Dated 4- 08 – 2006.

**1.3. DURATION OF THE COURSE.**

The Part-Time B-Tech. (Engineering) Degree course shall extend over a period of four academic years, comprising of eight semesters. The first and second semester which shall be combined and each semester from third semester onwards, shall cover the groups of subjects as given in the curriculum and the scheme of examination.

**1.4. ELIGIBILITY FOR THE DEGREE**

No candidates shall be eligible for the B-Tech. (Engineering) degree unless he has undergone the prescribed course of study for the period of not less than four academic years in an institution affiliated to the University of Kannur and has passed the examination in all the seven groups (I & II to VIII semester).

## **1.5. BRANCHES OF STUDY**

At the time of admission a student will be offered any one of the following branches of study and such other branches of study as may be instituted from time to time.

- Civil Engineering
- Mechanical Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering

## **1.6. SUBJECTS OF STUDY**

The subjects of study shall be both theory and practical and in accordance with the syllabi prescribed.

## **1.7. ELECTIVES**

The students shall select elective subjects as specified in the scheme and syllabi.

## **1.8. SESSIONAL WORK**

All students are to complete sessional work requirements as prescribed in the scheme and syllabi.

## **1.9. UNIVERSITY EXAMINATIONS**

(i) There shall be university examinations after the completion of I<sup>st</sup> and II<sup>nd</sup> semesters, and at the end of the every semesters from third semester onwards in subjects as prescribed under the respective scheme of examinations. A candidate who does not register for the examination shall not be permitted to attend the next semester.

(ii) A candidate will be permitted to register for the university examination only if he satisfies the following requirements.

(a) He must secure not less than 75 % attendance in the number of working hours during the first year and in each semester there after, and shall be physically present for a minimum of 65 % of the total working hours.

(b) He must earn an Attendance Progress & Conduct Certificate from the Principal of having satisfactorily completed the course of study prescribed in the semester as required by the regulations.

(iii) It shall be open to the Vice Chancellor to grant condonation of shortage of attendance with the following norms.

(a). The shortage shall not be more than 10 %

(b). Shortage up to 20 % shall be condoned only once during the entire course, provided such shortage is caused by continuous absence on genuine medical grounds.

(c). Shortage shall not be condoned more than three times during the entire course.

(d). A candidate who is not eligible for condonation of attendance, shall repeat the course, when it is offered again.

### **1.10. MINIMUM FOR A PASS**

(a). Candidate who secures not less than 50 % marks in a subject at the university examination shall be declared to have passed the examination in the subject. Candidates who secure not less than 40 % marks in the subjects at the university examinations and not less than 50 % of the total marks assigned to the subjects, which include the marks assigned to the university examination and sessional assessment, shall also be declared to have passed the examination in that subject.

(b). The pass mark for the project, seminar, Viva Voce and subjects having only sessional evaluations shall be 40 % of the total marks assigned to that subject. Candidate failing in the above subjects have to complete/ repeat the requirements again so as to secure a pass minimum of 40 %. There is no minimum mark for pass or fail for Physical education, Health and Fitness programme.

### **1.11. IMPROVEMENTS OF MARKS.**

1. A candidate who made his / her first successful attempt in any semester examination and secured a complete pass in the semester examination in the first attempt shall be permitted to reappear for improvement of marks for a maximum of three subjects (theory and practical put together) with out cancelling the earlier examinations.
2. A candidate, who has failed in only one subject (theory and practical put together) in a semester examination in his / her first attempt, shall be permitted to reappear for only two subjects of the semester concerned for improvement of marks without cancelling the earlier examination.
3. A candidate, who has failed in two subjects (theory and practical put together) in a semester examination in his / her first attempt, shall be permitted to reappear for only one subject of the semester concerned, for improvement of marks without canceling the earlier examination.
4. A candidate, who has failed in three or more subjects in a semester examination in his / her first attempt, shall not be permitted to reappear for improvement of marks in any of the subjects.
5. The appearance for improvement for eligible subjects should be made only in the immediate chance following the semester in which he / she has undergone the course.
6. Reappearance for the improvement of marks as per the above conditions is permitted for I & II to VII semester only, and improvements of marks is not permitted for the subjects in the VIII semester.

### **1.12. PROCEDURE FOR COMPLETING THE COURSE.**

1. A candidate shall be eligible to under go the course of study in the third semester if he/ she has completed satisfactorily the course of study in the combined I & II semester and registered for the I & II semester university examinations.
2. A candidate shall be eligible to under go the course of study in the IV semester if he/ she has completed satisfactorily the course of study in the III semester and registered for the III semester university examinations.
3. A candidate shall be eligible to under go the course of study in the V semester if he/ she has completed satisfactorily the course of study in the IV semester and registered for the IV semester university examinations.
4. A candidate shall be eligible to under go the course of study in the VI semester if he/ she has completed satisfactorily the course of study in the V semester and registered for the V semester university examinations.
5. A candidate shall be eligible to under go the course of study in the VII semester if he/ she has completed satisfactorily the course of study in the VI semester and registered for the VI semester university examinations and has passed in all subjects of combined I&II semester examinations.
6. A candidate shall be eligible to under go the course of study in the VIII semester if he/ she has completed satisfactorily the course of study in the VII semester and registered for the VII semester university examinations.
7. A candidate shall complete the programme and pass all the examinations with in eight years since his / her admission to B-Tech. programme.

### **1.13. CLASSIFICATION OF SUCCESSFUL CANDIDATES.**

- a) A candidate who qualifies for the degree passing all the subjects of the eight semesters within five academic years (ten consecutive semesters) after the commencement of his/her course of study, and secure not less than 75 % of the aggregate of total marks of all the semesters assigned to the university examination and sessional evaluation shall be declared to have passed the B-Tech. (Engineering) degree examination in First class with Honours.
- b) A candidate who qualifies for the degree passing all the subjects of eight semesters within five academic years (ten consecutive semesters) after the commencement of his/her course of study and secure not less than 60 % of the aggregate of total marks of all the semesters assigned to the university examination and sessional evaluation shall be declared to have passed the B-Tech. (Engineering) degree examination in the First class.
- c) For classification, improved marks will be taken into consideration.
- d) All other successful candidates shall be declared to have passed the examination for the degree in second class.
- e) Successful candidates who complete the examination in 4 academic years (eight consecutive semesters) shall be ranked branch- wise on the basis of aggregate marks in university examinations of all the semesters. However candidates who have appeared for supplementary examination(s) any time during the course will not be eligible for ranking.

### **1.14. REVISION OF REGULATIONS**

The university may time to time revise, amend or change regulations, curriculum, scheme of examinations and syllabi. These changes unless specified otherwise, will have effect from the beginning of the academic year following the notification by the University.

**CURRICULUM AND SCHEME OF EXAMINATIONS**  
**Common to Civil, Mechanical, Electrical & Electronics and Electronics and Communication**  
**Branches**  
**Combined First and Second Semester (Part – Time B.Tech Programme)**

**Combined Semester I & II**

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 EN 101	Engineering Mathematics I	2	0	-	50	3	100
PT 2K6 EN 102	Engineering Physics	2	0	-	50	3	100
PT 2K6 EN 103	Engineering Chemistry	2	0	-	50	3	100
PT 2K6 EN 104	Engineering Mechanics	2	0	-	50	3	100
PT 2K6 EN 105	Engineering Graphics	2	0	3	50	3	100
PT 2K6 EN 106	Basic Civil Engineering	2	0	-	50	3	100
PT 2K6 EN 107	Basic Mechanical Engineering	2	0	-	50	3	100
PT 2K6 EN 108	Basic Electrical Engineering	2	0	-	50	3	100
PT 2K6 EN 109	Basic Electronics and Computer Engineering	2	0	-	50	3	100
<b>Total</b>		<b>17</b>		<b>3</b>	<b>450</b>		<b>900</b>

**Civil Engineering (Part – Time B.Tech Programme)**  
For Semesters III to VIII

**Semester III**

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 CE 301	Engineering Mathematics II	2	1	-	50	3	100
PT 2K6 CE 302	Computer Programming	2	-	-	50	3	100
PT 2K6 CE 303	Mechanics of Structures	2	-	-	50	3	100
PT 2K6 CE 304	Surveying I	2	-	-	50	3	100
PT 2K6 CE 305	Building Materials and Construction Techniques	2	-	-	50	3	100
PT 2K6 CE 306	Fluid Mechanics I	2	1	-	50	3	100
PT 2K6 CE 307 (P)	Civil Engineering Drawing I	-	-	3	50	3	100
PT 2K6 CE 308 (P)	Surveying Practical I	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

**Semester IV**

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 CE 401	Engineering Mathematics III	2	1	-	50	3	100
PT 2K6 CE 402	Humanities	2	-	-	50	3	100
PT 2K6 CE 403	Structural Analysis I	2	-	-	50	3	100
PT 2K6 CE 404	Fluid Mechanics II	2	1	-	50	3	100
PT 2K6 CE 405	Surveying II	2	-	-	50	3	100
PT 2K6 CE 406	Engineering Geology	2	-	-	50	3	100
PT 2K6 CE 407 (P)	Strength of Materials Lab	-	-	3	50	3	100
PT 2K6 CE 408 (P)	Surveying Practical II	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

## FIFTH SEMESTER

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
2K6 PTCE 501	Engineering Mathematics IV	2	-	-	50	3	100
2K6 PTCE 502	Environmental Engineering and Disaster Management	2	-	-	50	3	100
2K6 PTCE 503	Structural Analysis II	2	1	-	50	3	100
2K6 PTCE 504	Concrete Technology	2	-	-	50	3	100
2K6 PTCE 505	Housing Architectural & planning	2	-	-	50	3	100
2K6 PTCE 506	Geotechnical Engineering I	2	1	-	50	3	100
2K6 PTCE 507(P)	Fluid Mechanics Lab	-	-	3	50	3	100
2K6 PTCE 508(P)	Concrete Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

## SIXTH SEMESTER

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
2K6PTCE 601	Economics and Management	2	-	-	50	3	100
2K6PTCE 602	Structural Analysis III	2	1	-	50	3	100
2K6PTCE 603	Design of Concrete structures	2	1	-	50	3	100
2K6PTCE 604	Geotechnical Engineering II	2	-	-	50	3	100
2K6PTCE 605	Environmental Engineering I	2	-	-	50	3	100
2K6PTCE 606	Elective I	2	-	-	50	3	100
2K6PTCE 607(P)	Civil Engineering Drawing II	-	-	3	50	3	100
2K6PTCE 608(P)	Geotechnical Engineering Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

### Elective I

1. 2K6PTCE 606(A) Irrigation Engineering
2. 2K6PTCE 606(B) Numerical Analysis
3. 2K6PT CE 606(C) Architectural engineering
4. 2K6PTCE 606(D) Remote Sensing and its application

## SEVENTH SEMESTER

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
2K6 PT CE 701	Design of steel structures	2	1		50	3	100
2K6 PT CE 702	Quantity surveying and Valuation	2			50	3	100
2K6 PT CE 703	Environmental Engineering II	2			50	3	100
2K6 PT CE 704	Transportation Engineering I	2			50	3	100
2K6 PT CE 705	Elective II	2			50	3	100
2K6 PT CE 706 (P)	CAD Lab			3	50	3	100
2K6 PT CE 707(P)	Environmental Engineering Lab/ Transportation Engineering Lab	-		3	50	3	100
2K6 PT CE 708(P)	Mini Project	-		3	50	-	-
2K6 PT CE 709(P)	Physical Education, Health & Fitness	-	-	-	50	-	-
<b>Total</b>		<b>10</b>	<b>1</b>	<b>9</b>	<b>450</b>	<b>-</b>	<b>700</b>

### Elective II

1. 2K6 PT CE 705 (A) -Prestressed concrete
2. 2K6 PT CE 705 (B) -Traffic Engineering
3. 2K6 PT CE 705 (C) -Reinforced earth and Geotextiles
4. 2K6 PT CE 705 (D) -Computational Methods and Operational Research

## EIGHTH SEMESTER

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
2K6 PT CE 801	Advanced Structural Design	2	1		50	3	100
2K6 PT CE 802	Construction Management	2	1		50	3	100
2K6 PT CE 803	Transportation Engineering II	2	1		50	3	100
2K6 PT CE 804	Design of Hydraulic Structures	2	1		50	3	100
2K6 PT CE 805	Elective III	2			50	3	100
2K6 PT CE 806 (P)	Seminar	-	-	3	50	-	-
*2K6 PT CE 807 (P)	Project & Industrial Training	-		3	100	-	-
2K6 PT CE 808 (P)	Viva-Voice	-	-	-	-	3	100
<b>Total</b>		<b>10</b>	<b>4</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>600</b>
<b>Aggregate marks for Eighth semester-8300</b>					<b>2900</b>		<b>5400</b>

\* 25marks allocated for Project& Industrial training

### Elective III

1. 2K6 PT CE 805 (A) Industrial Water Pollution Control.
2. 2K6 PT CE 805 (B) Highways & Airport Pavement Design.
3. 2K6 PT CE 805 (C) Optimization Techniques in Engineering.
4. 2K6 PT CE 805 (D) Finite Element Method.



# Mechanical Engineering (Part – Time B.Tech Programme)

For Semesters III to VIII

## Semester III

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 ME 301	Engineering Mathematics II	2	1	-	50	3	100
PT 2K6 ME 302	Computer Programming	2	-	-	50	3	100
PT 2K6 ME 303	Mechanics of Solids	2	-	-	50	3	100
PT 2K6 ME 304	Electrical Machines	2	-	-	50	3	100
PT 2K6 ME 305	Fluid Mechanics	2	1	-	50	3	100
PT 2K6 ME 306	Metallurgy and Material Science	2	-	-	50	3	100
PT 2K6 ME 307 (P)	Fluid Mechanics and Machinery Lab	-	-	3	50	3	100
PT 2K6 ME 308 (P)	Strength of Materials Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

## Semester IV

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 ME 401	Engineering Mathematics III	2	1	-	50	3	100
PT 2K6 ME 402	Humanities	2	-	-	50	3	100
PT 2K6 ME 403	Thermodynamics	2	-	-	50	3	100
PT 2K6 ME 404	Manufacturing Processess	2	-	-	50	3	100
PT 2K6 ME 405	Fluid Machinery	2	-	-	50	3	100
PT 2K6 ME 406	Machine Drawing	-	-	3	50	3	100
PT 2K6 ME 407 (P)	Production Engineering Lab 1	-	-	3	50	3	100
PT 2K6 ME 408 (P)	Electrical Engineering Lab	-	-	3	50	3	100
<b>Total</b>		<b>10</b>	<b>1</b>	<b>9</b>	<b>400</b>	<b>24</b>	<b>800</b>

FIFTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6PTME 501	Engineering Mathematics IV	2	1	-	50	3	100
2K6PTME 502	Environmental Engineering and Disaster Management	2	-	-	50	3	100
2K6PTME 503	Mechanics of Machinery	2	-	-	50	3	100
2K6PTME 504	Thermal Engineering	2	-	-	50	3	100
2K6PTME 505	CAD/CAM/CAE	2	1	-	50	3	100
2K6PTME 506	Machine Tools	2	-	-	50	3	100
2K6PTME 507(P)	Production Engg Lab II	-	-	3	50	3	100
2K6PTME 508(P)	Thermal Engineering Lab	-	-	3	50	3	100
<b>TOTAL</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>800</b>

SIXTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6PTME 601	Economics and Business Management	2	-	-	50	3	100
2K6PTME 602	Dynamics of Machinery	2	-	-	50	3	100
2K6PTME 603	Heat and Mass Transfer	2	-	-	50	3	100
2K6PTME 604	Advances in Manufacturing Engineering	2	1	-	50	3	100
2K6PTME 605	Operations Research	2	1	-	50	3	100
2K6PTME 606	Elective I	2	-	-	50	3	100
2K6PTME 607(P)	Heat Transfer Lab	-	-	3	50	3	100
2K6PTME 608(P)	CAD/CAM/CAE Lab	-	-	3	50	3	100
<b>TOTAL</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>800</b>

**Elective I**

**ELECTIVE-1**

- 2K6PTME 606(A): Numerical Methods
- 2K6PTME 606(B): Mechatronics
- 2K6PTME 606(C): CNC Programming
- 2K6PTME 606(D): Tool Engineering and Design
- 2K6PTME 606(E): Vibration and Noise Control

## SEVENTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Exam	
		L	T	P		Hours	Marks
2K6PTME 701	Metrology and Instrumentation	2	-	-	50	3	100
2K6PTME 702	Industrial Management	2	-	-	50	3	100
2K6PTME 703	Machine Design I	2	1	-	50	3	100
2K6PTME 704	Power plant Engineering	2	-	-	50	3	100
2K6PTME 705	Elective II	2	-	-	50	3	100
2K6PTME 706(P)	Instrumentation Lab	-	-	3	50	3	100
2K6PTME 707(P)	Computational Lab	-	-	3	50	3	100
2K6PTME 708(P)	Mini Project	-	-	3	50	-	-
2K6PTME 709(P)	Physical Education, Health and Fitness	-	-	-	50	-	-
<b>TOTAL</b>		<b>10</b>	<b>1</b>	<b>9</b>	<b>450</b>	<b>-</b>	<b>700</b>

### ELECTIVE-11

2K6PTME 705 (A) MARKETING MANAGEMENT

2K6PTME 705 (B) OPTIMIZATION TECHNIQUES

2K6PTME 705 (C) FLEXIBLE MANUFACTURING SYSTEMS

2K6PTME 705 (D) ADVANCED FLUID MECHANICS

2K6PTME 705 (E) MULTIPHASE FLOW

## EIGHTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Exam	
		L	T	P		Hours	Marks
2K6PTME 801	Gas Dynamics	2	1	-	50	3	100
2K6PTME 802	Refrigeration and Air conditioning	2	1	-	50	3	100
2K6PTME 803	Machine Design II	2	1	-	50	3	100
2K6PTME 804	Inventory and Supply Chain Management	2	-	-	50	3	100
2K6PTME 805	Elective III	2	1	-	50	3	100
2K6PTME 806(P)	Seminar	-	-	3	50	-	-
*2K6PTME 807(P)	Project and Industrial Training	-	-	3	100	-	-
2K6PTME 808(P)	Viva Voce	-	-	-	-	-	100
<b>TOTAL</b>		<b>10</b>	<b>4</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>600</b>
Aggregate marks for 8 semesters =8300					<b>2900</b>		<b>5400</b>

**\* 25 Marks is allotted for Industrial Training**

### **ELECTIVE-111**

2K6PTME 805(A) : FINITE ELEMENT ANALYSIS

2K6PTME 805(B) : NEURAL NETWORKS AND FUZZY LOGIC

2K6PTME 805(C) : COMPUTATIONAL FLUID MECHANICS AND HEAT TRANSFER

2K6PTME 805(D) : SYSTEM SIMULATION AND MODELING

2K6PTME 805(E) : QUALITY ENGINEERING AND MANAGEMENT

# Electrical & Electronics Engineering

## (Part – Time B.Tech Programme)

For Semesters III to VIII

### Semester III

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 EE 301	Engineering Mathematics II	2	1	-	50	3	100
PT 2K6 EE 302	Humanities	2	-	-	50	3	100
PT 2K6 EE 303	Mechanical Engineering	2	-	-	50	3	100
PT 2K6 EE 304	Electric Circuit and Systems	2	1	-	50	3	100
PT 2K6 EE 305	Network Analysis	2	-	-	50	3	100
PT 2K6 EE 306	Electrical Measurements and Measuring Instruments	2	-	-	50	3	100
PT 2K6 EE 307 (P)	Mechanical Engineering Lab	-	-	3	50	3	100
PT 2K6 EE 308 (P)	Basic Electronics Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

### Semester IV

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 EE 401	Engineering Mathematics III	2	1	-	50	3	100
PT 2K6 EE 402	Computer Programming	2	-	-	50	3	100
PT 2K6 EE 403	Microprocessors & Microcontrollers	2	1	-	50	3	100
PT 2K6 EE 404	Pulse and Digital Electronics	2	-	-	50	3	100
PT 2K6 EE 405	Electrical Machines I	2	-	-	50	3	100
PT 2K6 EE 406	Electrical Engineering Materials	2	-	-	50	3	100
PT 2K6 EE 407 (P)	Digital Electronics Lab	-	-	3	50	3	100
PT 2K6 EE 408 (P)	Electrical Measurements Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

FIFTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEE 501	Engineering Mathematics IV	2		-	50	3	100
2K6 PTEE 502	Environmental Engg: & Disaster Management	2		-	50	3	100
2K6 PTEE 503	Field Theory	2		-	50	3	100
2K6 PTEE 504	Electrical Machines II	2	1	-	50	3	100
2K6 PTEE 505	Modern Communication Systems	2		-	50	3	100
2K6 PTEE 506	Power systems - I	2	1	-	50	3	100
2K6 PTEE 507(P)	Linear Integrated circuits Lab	-	-	3	50	3	100
2K6 PTEE 508(P)	Electrical Machines Lab- I	-	-	3	50	3	100
<b>TOTAL</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>800</b>

SIXTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEE 601	Economics & Business Management	2	-	-	50	3	100
2K6 PTEE 602	Power Electronics	2	-	-	50	3	100
2K6 PTEE 603	Power Systems-II	2	-	-	50	3	100
2K6 PTEE 604	Control Systems-I	2	-	-	50	3	100
2K6 PTEE 605	Electrical Engg. Drawing	1	-	3	50	3	100
2K6 PTEE 606	Elective - I	2	-		50	3	100
2K6 PTEE 607(P)	Electrical Machines Lab-II	-	-	3	50	3	100
2K6 PTEE 608(P)	Power Electronics Lab	-	-	3	50	3	100
<b>TOTAL</b>		<b>11</b>	<b>-</b>	<b>9</b>	<b>400</b>	<b>-</b>	<b>800</b>

**Elective I**

2K6 PTEE 606 (A) - Electrical System Design & Estimation

2K6 PTEE 606 (B) - Energy Conservation

2K6 PTEE 606 (C) -Linear System analysis

2K6 PTEE 606 (D) - Cellular & Mobile Communication Systems

2K6 PTEE 606 (E) - Industrial Psychology

2K6 PTEE 606 (F) - Operations research

SEVENTH SEMESTER

Code	Subject	Hours /Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6PTEE 701	Industrial Management	2	-	-	50	3	100
2K6PTEE 702	Digital Signal Processing	2	1	-	50	3	100
2K6PTEE 703	Control Systems II	2	-	-	50	3	100
2K6PTEE 704	Power Systems III	2	-	-	50	3	100
2K6PTEE 705	Elective II	2	-	-	50	3	100
2K6PTEE 706(P)	Advanced Electrical Engg: Lab	-	-	3	50	3	100
2K6PTEE 707(P)	Software Lab	-	-	3	50	3	100
2K6PTEE 708(P)	Mini Project	-	-	3	50	-	-
2K6PTEE 709(P)	Physical Education, Health & Fitness				50		
<b>TOTAL</b>		<b>10</b>	<b>1</b>	<b>9</b>	<b>450</b>	<b>-</b>	<b>700</b>

**Elective II**

- 2K6 PTEE 705(A) – High Voltage Engineering
- 2K6 PTEE 705(B) – Electrical Machine modelling & Analysis
- 2K6 PTEE 705(C) - Switched Mode Power Converters
- 2K6 PTEE 705(D) - Biomedical Engineering
- 2K6 PTEE 705(E) – Robotics & Artificial Intelligence
- 2K6 PTEE 705(F) – Entrepreneurship

EIGHTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEE 801	Instrumentation Systems	2		-	50	3	100
2K6 PTEE 802	Industrial Electric Drives	2	1	-	50	3	100
2K6 PTEE 803	Electrical Machine design	2	1	-	50	3	100
2K6 PTEE 804	Energy Technology	2	1	-	50	3	100
2K6 PTEE 805	Elective III	2	1	-	50	3	100
2K6 PTEE 806(P)	Seminar	-	-	3	50	-	-
*2K6 PTEE 807(P)	Project & Industrial Training	-	-	3	100	-	
2K6 PTEE 808(P)	Viva Voce	-	-	-	-	3	100
<b>TOTAL</b>		<b>10</b>	<b>4</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>600</b>
<b>Aggregate marks for 8 semesters = 8300</b>					<b>2900</b>		<b>5400</b>

\*25 Marks is allocated for Industrial Training

**Elective III**

- 2K6 PTEE 805(A) – Power System Operation & Control
- 2K6 PTEE 805(B) – Special Machines & Linear Machines
- 2K6 PTEE 805(C) - Neural Networks & Fuzzy Logic
- 2K6 PTEE 805(D) – Digital System design
- 2K6 PTEE 805(E) –Satellite Communication Systems
- 2K6 PTEE 805(F) – HVDC & FACTS

## Electronics & Communication Engineering (Part – Time B.Tech Programme)

For Semesters III to VIII

### Semester III

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 EC 301	Engineering Mathematics II	2	1	-	50	3	100
PT 2K6 EC 302	Humanities	2	-	-	50	3	100
PT 2K6 EC 303	Electrical Engineering	2	-	-	50	3	100
PT 2K6 EC 304	Solid State Devices	2	-	-	50	3	100
PT 2K6 EC 305	Network Theory	2	1	-	50	3	100
PT 2K6 EC 306	Electronic Circuits I	2	-	-	50	3	100
PT 2K6 EC 307 (P)	Basic Electronics Lab	-	-	3	50	3	100
PT 2K6 EC 308 (P)	Electrical Engineering Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>

### Semester IV

Code	Subject	Hrs / week			Sessional Marks	University Exam	
		L	T	P		Hrs	Marks
PT 2K6 EC 401	Engineering Mathematics III	2	1	-	50	3	100
PT 2K6 EC 402	Computer Programming	2	-	-	50	3	100
PT 2K6 EC 403	Communication Engineering I	2	-	-	50	3	100
PT 2K6 EC 404	Signals and Systems	2	-	-	50	3	100
PT 2K6 EC 405	Electronics Circuits II	2	1	-	50	3	100
PT 2K6 EC 406	Digital Electronics	2	-	-	50	3	100
PT 2K6 EC 407 (P)	Electronics Circuits Lab	-	-	3	50	3	100
PT 2K6 EC 408 (P)	Digital Electronics Lab	-	-	3	50	3	100
<b>Total</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>		<b>800</b>



## FIFTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEC 501	Engineering Mathematics IV	2		-	50	3	100
2K6 PTEC 502	Economics and Business Management	2		-	50	3	100
2K6 PTEC 503	Applied Electromagnetic Field theory	2	1	-	50	3	100
2K6 PTEC 504	Computer Organization & Architecture	2	1	-	50	3	100
2K6 PTEC 505	Linear Integrated Circuits	2		-	50	3	100
2K6 PTEC 506	Microprocessors and Microcontrollers	2		-	50	3	100
2K6 PTEC 507(P)	Linear Integrated Circuits Lab	-	-	3	50	3	100
2K6 PTEC 508(P)	Computer Programming Lab	-	-	3	50	3	100
<b>TOTAL</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>800</b>

## SIXTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEC 601	Environmental Engineering & Disaster Management	2		-	50	3	100
2K6 PTEC 602	Control Systems	2		-	50	3	100
2K6 PTEC 603	Radiation & Propagation	2		-	50	3	100
2K6 PTEC 604	Digital Signal Processing	2	1	-	50	3	100
2K6 PTEC 605	Digital Communication	2	1	-	50	3	100
2K6 PTEC 606	Elective-I	2		-	50	3	100
2K6 PTEC 607(P)	Communication Engineering Lab -I	-	-	3	50	3	100
2K6 PTEC 608(P)	Microprocessors & Microcontroller lab	-	-	3	50	3	100
<b>TOTAL</b>		<b>12</b>	<b>2</b>	<b>6</b>	<b>400</b>	<b>-</b>	<b>800</b>

### Elective I

1. 2K6 PTEC 606(A) : DESIGNING WITH VHDL
2. 2K6 PTEC 606(B) : HIGH SPEED DIGITAL DESIGN
3. 2K6 PTEC 606(C) : LINEAR SYSTEMS ANALYSIS
4. 2K6 PTEC 606 (D) : DATA STRUCTURES & ALGORITHMS
5. 2K6 PTEC 606(E) : ANALOG MOS CIRCUITS

## SEVENTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEC 701	Microelectronics Technology	2	-	-	50	3	100
2K6 PTEC 702	Microwave Engineering	2	-	-	50	3	100
2K6 PTEC 703	Information Theory and Coding	2	-	-	50	3	100
2K6 PTEC 704	Television Engineering	2	1	-	50	3	100
2K6 PTEC 705	Elective II	2	-	-	50	3	100
2K6 PTEC 706(P)	Simulation Lab	-	-	3	50	3	100
2K6 PTEC 707(P)	Communication Engineering Lab –II	-	-	3	50	3	100
2K6 PTEC 708(P)	Mini Project	-	-	3	50	-	-
2K6PTEC709(P)	Physical Education, Health & Fitness	-	-	-	50	-	-
TOTAL		10	1	9	450	-	700

### Elective II

- 2K6PT EC 705 (A) - Probability and Random Process
- 2K6 PTEC 705 (B) - Satellite Communication
- 2K6 PTEC 705 (C) - Soft Computing
- 2K6PTEC 705 (D) - R F System Design
- 2K6 PTEC 705 (E) - Industrial Electronics
- 2K6PT EC 705 (F) - Data Compression

## EIGHTH SEMESTER

Code	Subject	Hours/Week			Sessional Marks	University Examination	
		L	T	P/D		Hrs	Marks
2K6 PTEC 801	Radar and Navigation	2	1	-	50	3	100
2K6PT EC 802	Optical Communication	2	1	-	50	3	100
2K6PT EC 803	Computer Communication & Networking	2	1	-	50	3	100
2K6 PTEC 804	Wireless Mobile Communication	2	1	-	50	3	100
2K6 PTEC 805	Elective III	2	-	-	50	3	100
2K6 PTEC 806(P)	Seminar	-	-	3	50	-	-
*2K6PT EC 807(P)	Project & Industrial Training	-	-	3	100	-	-
2K6 PTEC 808(P)	Viva Voce	-	-	-	-	-	100
TOTAL		10	4	6	400	-	600
Aggregate marks for 8 semesters = 8300					2900		5400

\*25 Marks is allocated for Industrial Training

### Elective III

- 2K6PT EC 805( A) – Advanced Digital Signal Processing
- 2K6 PTEC 805( B) – Digital Image Processing
- 2K6 PTEC 805 (C) –Communication Switching Systems
- 2K6 PTEC 805 (D) – Embedded System
- 2K6 PTEC 805 (E) – Secure Communications
- 2K6 PTEC 805(F) – Optimization Techniques