

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW

Study & Evaluation Scheme

B Tech Civil Engineering

Effective from session 2016-17

Final Year, VII Semester

| S No | Course Code | SUBJECT | PERIODS | | | Evaluation Scheme | | | Subject Total | Credit | |
|------------------------------|-------------------|----------------------------|---------|---|---|-------------------|----|-------|---------------|--------|-----|
| | | | L | T | P | Sessional Exam | | | | | ESE |
| | | | | | | CT | TA | Total | | | |
| THEORY SUBJECT | | | | | | | | | | | |
| 1 | NOE071- NOE074 | Open Elective – I | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NCE031- NCE035 | Department Elective-III | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | NCE041- NCE044 | Department Elective-IV | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | NCE701 | Design of Steel Structures | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 5 | NCE702 | Water Resources Engg | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| PRACTICAL / DESIGN / DRAWING | | | | | | | | | | | |
| 6 | NCE751 | Seminar | 0 | 0 | 4 | - | - | 50 | - | 50 | 1 |
| 7 | NCE752 | Industrial Training** | | | | - | - | 50 | - | 50 | 1 |
| 8 | NCE753 | Project# | 0 | 0 | 4 | - | - | 100 | - | 100 | 3 |
| 9 | NGP 701 | General Proficiency | - | - | - | - | - | 50 | - | 50 | 1 |
| | | Total | 15 | 5 | 8 | | | | | 1000 | 26 |

** 4 weeks Industrial Training after VI semester to be evaluated in VII semester.

Project should be initiated in VII semester beginning and should be completed by the end of VIII semester.

Departmental Elective-3 (Full Unit Course with Credit: 4)

| S. No. | Code and Course |
|--------|---|
| 2 (A) | NCE 031 - Bridge Engineering |
| 2 (B) | NCE 032 - Finite Element Methods |
| 2(C) | NCE 033 - Environmental Geo-technology |
| 2(D) | NCE 034 - Industrial Pollution Control & Env. Audit |
| 2 (E) | NCE 035 – Engineering Hydrology |

Departmental Elective-4 (Full Unit Course with Credit: 4)

| S. No. | Code and Course |
|--------|--|
| 3 (A) | NCE 041 - Precast and Modular Construction Practices |
| 3 (B) | NCE 042 - Plastic Analysis of Structures |
| 3 (C) | NCE 043 - Open Channel Flow |
| 3 (D) | NCE 044 – Tunnel Engineering |

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW

Study & Evaluation Scheme

B Tech Civil Engineering

Effective from session 2016-17

Final Year, VIII Semester

| S No | Course Code | SUBJECT | PERIODS | | | Evaluation Scheme | | | | Subject Total | Credit |
|-------------------------------------|-------------------|--------------------------------|---------|---|----|-------------------|-----|-------|-----|---------------|--------|
| | | | L | T | P | Sessional Exam | | | ESE | | |
| | | | | | | CT | TA | Total | | | |
| THEORY SUBJECT | | | | | | | | | | | |
| 1 | NOE081- NOE084 | Open Elective – II | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NCE051- NCE054 | Departmental Elective-V | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | NCE061- NCE064 | Departmental Elective-VI | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | NCE801 | Transportation Engineering -II | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 3 |
| PRACTICAL / DESIGN / DRAWING | | | | | | | | | | | |
| 5 | NCE851 | Project | 0 | 0 | 12 | | 100 | 100 | 250 | 350 | 8 |
| 6 | NGP 801 | General Proficiency | - | - | - | - | - | 50 | - | 50 | 1 |
| | | Total | 12 | 4 | 12 | | | | | 1000 | 24 |

Departmental Elective-5 (Full Unit Course with Credit: 4)

| S. No. | Code and Course |
|--------|---|
| 2 (A) | NCE 051 - Computer Aided Design |
| 2 (B) | NCE 052 - Analysis and Design of Hydraulic Structures |
| 2 (C) | NCE 053 - Water Resources Systems |
| 2 (D) | NCE 054 - Machine Foundation Design |

Departmental Elective-6 (Full Unit Course with Credit: 4)

| S. No. | Code and Course |
|--------|---|
| 3 (A) | NCE061 - Ground Improvement Techniques |
| 3 (B) | NCE 062 - River Engineering |
| 3 (C) | NCE 063 – Groundwater Management |
| 3 (D) | NCE 064 - Earthquake Resistant Design of Structures |

Dr.A.P.J.Abdulkalam Technical University, UttarPardesh,Lucknow
(Formerly Uttar Pradesh Technical University)

STUDY EVALUATION SCHEME

B. TECH. COMPUTER SCIENCE & ENGINEERING

YEAR forth, SEMESTER –VII

(Effective from the session: 2016-17)

| S.No. | Subject Code | Subject | Period | Evaluation Scheme | | | | Total | Credit |
|---------------------------------------|--------------|----------------------------------|----------------|-------------------|-----|-------|------|-------------|-----------|
| | | | | Sessional | | | Exam | | |
| | | | | CT | TA | Total | | | |
| 1 | | Open Elective I | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NCS-701 | Distributed System | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | NCS-702 | Artificial Intelligence | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | | Departmental Elective III | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 5 | | Departmental Elective IV | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| Practical / Training /Projects | | | | | | | | | |
| 6 | NCS-751 | Distributed System * | 0-0-2 | - | 20 | 20 | 30 | 50 | 1 |
| 7 | NCS-752 | Project | 0-0-6 | - | 100 | 100 | - | 100 | 3 |
| 8 | NCS-753 | Industrial Training | 0-0-2 | - | 50 | 50 | - | 50 | 1 |
| 9 | GP-701 | General Proficiency | - | - | - | - | - | 50 | |
| | | Total | 15-5-10 | | | | | 1000 | 25 |

1. Practical Training done after 6th Semester would be evaluated in 7th semester through Report and Viva-voce.
2. Project has to be initiated in 7th semester beginning and completed by the end of 8th semester with proper report and demonstration.

* At least 10 problems are to be considered based on corresponding theory course.

Dr.A.P.J.Abdul kalam Technical University,UttarPardesh,Lucknow
 (Formerly Uttar Pradesh Technical University)
STUDY EVALUATION SCHEME
B. TECH. COMPUTER SCIENCE & ENGINEERING
YEAR forth, SEMESTER –VIII
 (Effective from the session: 2016-17)

| SNo | Subject Code | Subject | Period | Evaluation Scheme | | | | Total | Credit |
|---|--------------|--------------------------|----------------|-------------------|-----|-------|------|-------------|-----------|
| | | | | Sessional | | | Exam | | |
| | | | | CT | TA | Total | | | |
| 1 | | Open Elective II | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NCS-801 | Digital Image Processing | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | | Departmental Elective V | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | | Departmental Elective VI | 3-1-0 | 30 | 20 | 50 | 100 | 150 | 4 |
| Practical's / Training /Projects | | | | | | | | | |
| 5 | NCS-851 | Seminar | 0-0-3 | - | 50 | 50 | - | 50 | 2 |
| 6 | NCS-852 | Project | 0-0-12 | - | 100 | 100 | 200 | 300 | 7 |
| 7 | GP-801 | General Proficiency | - | - | - | - | - | 50 | |
| | | Total | 12-4-15 | | | | | 1000 | 25 |

AKTU, LUCKNOW, U.P
Study and Evaluation Scheme B. Tech. in Electronics Engg/Electronics & Communication
Engg/Electronics & Telecommunication Engg
[Effective from the session 2016-17]

YEAR 4th, SEMESTER-VII

| S. No. | Course Code | SUBJECT | PERIODS | | | Evaluation Scheme | | | | Subject Total | Credit |
|---------------------------------|-------------|--|-----------|----------|----------|-------------------|------------|------------|------------|---------------|-----------|
| | | | | | | SESSIONAL EXAM. | | | ESE | | |
| | | | L | T | P | CT | TA | Total | | | |
| THEORY SUBJECTS | | | | | | | | | | | |
| 1. | NOE 07* | Open Elective-I** | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2. | NEC 03* | Departmental Elective-III | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3. | NEC 701 | Optical Communication | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4. | NEC 702B | Data Communication Networks | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 5. | NEC 703 | VLSI Design | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 6. | AUC 001 | *Human Values & Professional Ethics | 2 | 0 | 0 | 15 | 10 | 25 | 50 | 75 | - |
| PRACTICAL/DESIGN/DRAWING | | | | | | | | | | | |
| 7. | NEC 751 | Optical Communication & Networking Lab | 0 | 0 | 2 | - | 20 | 20 | 30 | 50 | 1 |
| 8. | NEC 752A | Electronics Circuit Design | 0 | 0 | 3 | - | 20 | 20 | 30 | 50 | 2 |
| 9. | NEC 753 | Industrial Training Viva-Voce | 0 | 0 | 2 | - | 50 | 50 | - | 50 | 1 |
| 10. | NEC 754 | Project | 0 | 0 | 2 | - | 50 | 50 | - | 50 | 1 |
| 11. | NGP 701 | General Proficiency | - | - | - | - | - | 50 | - | 50 | 1 |
| | | Total | 15 | 5 | 9 | 150 | 240 | 440 | 560 | 1000 | 26 |

**** Open Electives-I**

NOE-071 Entrepreneurship Development
 NOE-072 Quality Management
 NOE-073 Operation Research
 NOE-074 Introduction to Biotechnology
 NOE-075 Micro and smart systems

AKTU, LUCKNOW, U.P
Study and Evaluation Scheme B. Tech. in Electronics Engg/Electronics & Communication
Engg/Electronics & Telecommunication Engg
[Effective from the session 2016-17]

YEAR 4th, SEMESTER-VIII

| S. No. | Course Code | SUBJECT | PERIODS | | | Evaluation Scheme | | | | Subject Total | Credit |
|---------------------------------|-------------|-------------------------------------|-----------|----------|-----------|-------------------|------------|------------|------------|---------------|-----------|
| | | | | | | SESSIONAL EXAM. | | | ESE | | |
| | | | L | T | P | CT | TA | Total | | | |
| THEORY SUBJECTS | | | | | | | | | | | |
| 1. | NOE 08* | Open Elective-II** | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2. | NEC 04* | Departmental Elective-IV | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3. | NEC 801 | Wireless & Mobile Communication | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4. | NEC 802 | Optical Network | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 3 |
| 5. | AUC 001 | *Human Values & Professional Ethics | 2 | 0 | 0 | 15 | 10 | 25 | 50 | 75 | - |
| PRACTICAL/DESIGN/DRAWING | | | | | | | | | | | |
| 6. | NEC 851 | Project | 0 | 0 | 12 | - | 100 | 100 | 250 | 350 | 8 |
| 7. | NGP 801 | General Proficiency | - | - | - | - | - | 50 | - | 50 | 1 |
| | | Total | 12 | 4 | 12 | 120 | 180 | 350 | 650 | 1000 | 24 |

**** Open Electives-II**

NOE-081 Non Conventional Energy Resources
 NOE-082 Nonlinear Dynamic system
 NOE-083 Product Development
 NOE-084 Automation and Robotics

**STUDY AND EVALUATION SCHEME OF ELECTRICAL ENGINEERING
VIIth Semester**

| S. NO. | SUBJECT CODE | NAME OF THE SUBJECT | PERIODS | | | EVALUATION SCHEME | | | | SUBJECT TOTAL | CREDIT |
|---------------------------------|----------------------|--------------------------------|-----------|----------|-----------|---------------------|----|-------|-----|---------------|-----------|
| | | | L | T | P | SESSIONAL ASSESMENT | | | ESE | | |
| | | | | | | CT | TA | TOTAL | | | |
| THEORY SUBJECT | | | | | | | | | | | |
| 1 | NEE-701 | ELECTRIC DRIVES | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NEE-702 | POWER STATION PRACTICE | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | NEC-702A | ANALOG & DIGITAL COMMUNICATION | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | NEE-031-033, NCS-039 | DEPARTMENTAL ELECTIVE-III | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 5 | NOE-071-NOE-074 | OPEN ELECTIVE-1 | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| PRACTICAL/DESIGN/DRAWING | | | | | | | | | | | |
| 6 | NEE-751 | ELECTRIC DRIVE LAB | 0 | 0 | 3 | 10 | 10 | 20 | 30 | 50 | 1 |
| 7 | NEC-752B | ADC LAB | 0 | 0 | 3 | 10 | 10 | 20 | 30 | 50 | 1 |
| 8 | NEE-753 | INDUSTRIAL TRAINING | 0 | 0 | 2 | 30 | 20 | 50 | -- | 50 | 1 |
| 9 | NEE-754 | PROJECT | 0 | 0 | 2 | 30 | 20 | 50 | -- | 50 | 1 |
| 10 | NGP-701 | GP | | | | | 50 | 50 | -- | 50 | 1 |
| | | TOTAL | 16 | 5 | 10 | | | | | 1000 | 24 |

LIST OF DEPARTMENTAL ELECTIVE-III

NEE-031 POWER SYSTEM OPERATION AND CONTROL
 NEE-032 ADVANCED MICROPROCESSORS AND MICROCONTROLLERS
 NEE-033 FLEXIBLE AC TRANSMISSION SYSTEMS
 NCS-039 OBJECT ORIENTED SYSTEMS AND C++

LIST OF OPEN ELECTIVE-I

NOE-071 ENTREPRENEURSHIP DEVELOPMENT
 NOE-072 QUALITY MANAGEMENT
 NOE-073 OPERATION RESEARCH
 NOE-074 INTRODUCTION TO BIO TECHNOLOGY

**STUDY AND EVALUATION SCHEME OF ELECTRICAL ENGINEERING
VIIIth Semester**

| S. NO. | SUBJECT CODE | NAME OF THE SUBJECT | PERIODS | | | EVALUATION SCHEME | | | ESE | SUBJECT TOTAL | CREDIT |
|---------------------------------|-------------------|--|---------|---|----|---------------------|-----|-------|-----|---------------|--------|
| | | | L | T | P | SESSIONAL ASSESMENT | | | | | |
| | | | | | | CT | TA | TOTAL | | | |
| THEORY SUBJECT | | | | | | | | | | | |
| 1 | NEE-801 | ELECTRICAL & ELECTRONICS ENGINEERING MATERIALS | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NEE-802 | UTILIZATION OF ELECTRICAL ENERGY AND TRACTION | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 3 |
| 3 | NEE-041 - NEE-044 | DEPARTMENTAL ELECTIVE-IV | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | NOE-081 - NOE-084 | OPEN ELECTIVE-2 | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| PRACTICAL/DESIGN/DRAWING | | | | | | | | | | | |
| 5 | NEE-851 | PROJECT | 0 | 0 | 12 | 0 | 100 | 100 | 250 | 350 | 8 |
| 6 | NGP-801 | GP | | | | | 50 | 50 | - | 50 | 1 |
| | | TOTAL | 14 | 5 | 12 | | 180 | 350 | 650 | 1000 | 24 |

LIST OF DEPARTMENTAL ELECTIVE IV

NEE-041 EHVAC&DC TRANSMISSION
 NEE-042 POWER QUALITY
 NEE-043 EMBEDDED SYSTEM
 NEE-044 SCADA

LIST OF OPEN ELECTIVE 2

NOE-081 NON-CONVENTIONAL ENERGY RESOURCES
 NOE-082 NON LINEAR DYNAMIC SYSTEMS
 NOE-083 DATA BASE MANAGEMENT SYSTEM AND DATA MINING AND WAREHOUSING
 NOE-084 AUTOMATION & ROBOTICS

U.P. TECHNICAL UNIVERSITY, LUCKNOW

STUDY & EVALUATION SCHEME

B. Tech. Mechanical Engineering / Production Engineering / Industrial & Production Engineering / Mechanical & Industrial Engineering
[Effective from Session 20016-17]

YEAR IV, SEMESTER-VII

| S. No. | Subject Code | Name of the Subject | Periods | | | Evaluation Scheme | | | Subject Total | Credit | |
|---------------------------------|--------------------|----------------------------------|-----------|----------|----------|----------------------|----|-------|---------------|-------------|-----------|
| | | | L | T | P | Sessional Assessment | | | | | ESE |
| | | | | | | CT | TA | Total | | | |
| THEORY SUBJECT | | | | | | | | | | | |
| 1 | NOE-071 to 074 | Open Elective -I | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NME-701 | CAD | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | NME-702 | Automobile Engineering | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | NME-031 to NME-034 | Departmental Elective – III | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 5 | NME-041 to NME-044 | Departmental Elective – IV | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| PRACTICAL/DESIGN/DRAWING | | | | | | | | | | | |
| 5 | NME-751 | CAD/CAM Lab | 0 | 0 | 2 | 10 | 10 | 20 | 30 | 50 | 1 |
| 6 | NME-752 | I. C. Engine and Automobile Lab. | 0 | 0 | 2 | 10 | 10 | 20 | 30 | 50 | 1 |
| 7 | NME-753 | INDUSTRIAL TRG. | 0 | 0 | 2 | - | 50 | 50 | - | 50 | 1 |
| 8 | NME-754 | PROJECT | 0 | 0 | 3 | - | 50 | 50 | - | 50 | 2 |
| | GP-701 | GP | - | - | - | - | - | 50 | - | 50 | - |
| | | TOTAL | 15 | 5 | 9 | | | | | 1000 | 25 |

Note- Practical Training-1 & 2 (4-weeks each) done after 4th & 6th Semesters would be evaluated in 7th semester through report and viva voce etc.
Project should be initiated in 7th semester beginning (**End Semester Examination to be conducted for evaluation for 7th sem**), and should be complete by the end of 8th semester with good Report and power-point Presentation etc.

Open Electives – I

- NOE-071 Entrepreneurship Development
- NOE-072 Quality Management
- NOE-073 Operations Research
- NOE-074 Introduction to Biotechnology

Departmental Elective III

- NME-031 Computer Aided Manufacturing
- NME-032 Project Management
- NME-033 Computational Fluid Dynamics
- NME-034 Composite materials

Departmental Elective IV

- NME-041 Total Quality Management
- NME-042 Thermal Turbo Machines
- NME-043 Mechanical System Design
- NME-044 Automation and Robotics

U.P. TECHNICAL UNIVERSITY, LUCKNOW

STUDY & EVALUATION SCHEME

B. Tech. Production Engineering / Industrial & Production Engineering / Mechanical & Industrial Engineering
[Effective from Session 20016-17]

YEAR IV, SEMESTER-VIII

| S. No. | Subject Code | Name of the Subject | Periods | | | Evaluation Scheme | | | | Subject Total | Credit |
|---------------------------------|--------------------|---------------------------|-----------|----------|-----------|----------------------|-----|-------|-----|---------------|-----------|
| | | | L | T | P | Sessional Assessment | | | ESE | | |
| | | | | | | CT | TA | Total | | | |
| THEORY SUBJECT | | | | | | | | | | | |
| 1 | NOE-081 to 084 | Open Elective -II | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 2 | NPI-801 | Quality Control | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 3 | NME-051 to NME-055 | Departmental Elective -V | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| 4 | NME-061 to NME-065 | Departmental Elective -VI | 3 | 1 | 0 | 30 | 20 | 50 | 100 | 150 | 4 |
| PRACTICAL/DESIGN/DRAWING | | | | | | | | | | | |
| 5 | NME-851 | SEMINAR | 0 | 0 | 3 | - | 50 | 50 | - | 50 | 2 |
| 6 | NME-852 | PROJECT | 0 | 0 | 12 | - | 100 | 100 | 200 | 300 | 7 |
| 7 | GP-801 | GP | - | - | - | - | - | 50 | - | 50 | - |
| | | TOTAL | 12 | 4 | 15 | | | | | 1000 | 25 |

Open Electives – II

NOE-081 Non Conventional Energy Resources
NOE-082 Nonlinear Dynamic Systems
NOE-083 Product Development
NOE-084 Automation and Robotics

Departmental Elective V

NME-051 Operations Research
NME-052 Design of Thermal Systems
NME-053 Advance Synthesis of machines
NME-054 Industrial Automation
NME-055 Advance Welding Technology

Departmental Elective VI

NME-061 Experimental Stress Analysis
NME-062 Plant Layout and Material Handling
NME-063 Additive Manufacturing
NME-064 Computer Aided Process Planning
NME-065 Non Destructive Testing