AP ECET Syllabus & Andhra Pradesh Engineering Common Entrance Test (Diploma) Exam Pattern

Engineering Stream:

Subjects For the Test	Max. Marks	Remarks	
Mathematics	50	Common To All branches	
Physics	25	Common To All branches	
Chemistry	25	Common To All branches	
Engineering (Civil/Electrical/ Mechanical/Electronics & Communication/ Computer/Chemical/Metallurgical /Mining/ Electronics & Instrumentation/ Ceramic Technology/Bio-Technology as the case may be)	100	Separate question paper for each branch of Engineering	
Total	200		
acy Stream			

Pharmacy Stream

Subjects For the Test	Max. Marks
Pharmaceutics	50
Pharmaceutical Chemistry	50
Pharmacognosy	50
Pharmacology	50
Total	200

B.Sc. Mathematics Stream

Subjects For the Test	Max. Marks
Mathematics	100
Analytical Ability	50
Communicative English	50
Total	200

AP ECET Diploma Syllabus For Diploma

Mathematics

- Partial Fractions.
- Trigonometry.
- Complex Numbers.
- Differential Equations.
- Analytical Geometry.
- Differentiation and its Applications.
- Integration and Its Applications.
- Matrices.

Chemistry

- Solutions.
- Corrosion.
- Acids and Bases.
- Electrochemistry.
- Water Technology.
- Polymers.
- Fuels.
- Environmental chemistry.
- Atomic Structure.
- Chemical Bonding.

Physics

- Elements of vectors.
- Kinematics and Friction.
- Work, Power, and Energy.
- Modern Physics.
- Simple harmonic motion and acoustics.
- Heat and Thermodynamics.
- Units and dimensions.

AP ECET Syllabus 2019 for Engineering

AP ECET Syllabus For Civil Engineering

- Hydraulics.
- Irrigation Engineering.
- The Strength of Materials.
- Theory of Structures.
- Reinforced Concrete Structures.
- Surveying.

AP ECET Syllabus For Mechanical Engineering

- Refrigeration.
- Industrial Management and Engineering.
- Automobile Engineering.
- Workshop Technology.
- Welding, Forging, Foundry and Conventions
- The Design of Machine Elements.
- Thermodynamics.
- Hydraulic Machines and Pneumatics.
- Steam Boilers, Nozzlers, and Turbines. in drawing.
- Engineering Materials, and Solid Mechanics

Electronics and Instrumentation Engineering

- Electrical Engineering.
- Industrial electronics and control engineering.
- Electronics.
- Digital Electronics.
- Electronic Measuring Instruments.
- Process Instrumentation.
- Process Control.
- Communications and Linear IC Applications.
- Analytical and Biomedical instrumentation.
- Microcontroller & PLCs.

Electrical and Electronics Engineering (EEE)

- D.C. Machines, Batteries & Measuring Instruments.
- A.C. Circuits And Transformers.
- A.C. Machines.
- Power System Generation & Protection.
- Electric Traction.
- Electrical Estimation.
- Basic Electronics And Digital Electronics.
- Power Electronics And Micro Controller.
- Basic Electrical Engineering.
- Transmission And Distribution.

Electronics and Communication Engineering (ECE)

- Data Communications and Computer Networks.
- Electronic Devices and Circuits.
- Circuit Theory.
- Electronic Measuring Instruments.
- Industrial and Power Electronics.

- Communication Systems.
- Advanced Communication Systems.
- Digital Electronics.
- Microcontrollers and Microprocessors.
- Audio Video Systems.

Computer Science Engineering (CSE)

- Digital Electronics.
- Microprocessors.
- Computer Organization.
- C and Data Structures.
- Computer Networks.
- Operating Systems.
- RDBMS.
- Object Oriented Programming Through C++.
- Java Programming.
- Internet Programming.

Ceramic Technology

- Refractories.
- Glass Technology.
- Cement Technology.
- Advanced Ceramics.
- Fuels, Furnaces & Pyrometry.
- Enamels and Glazes.
- Geology and Mineralogy of Ceramic Raw Materials.
- White Ware & Heavy Clay Ware.

Chemical Engineering

- Mass Transfer.
- Instrumentation & Process control.
- Environmental Studies and Pollution Control Engineering.
- Heat transfer.
- Energy Technology & Plant Operation.
- Material Technology.
- Chemical process principles.
- Organic Chemical Technology.
- Inorganic Chemical Technology.
- Fluid mechanics.
- Mechanical unit operations.
- Thermodynamics and Reaction Engineering.

Metallurgical Engineering

- Foundry Technology.
- Welding Technology.
- Elementary Principles of Metallurgy.
- Fuels, Refractories, and Pyrometry.
- Metallurgical Thermodynamics.
- Physical Metallurgy.
- Heat Treatment Technology.
- Ferrous Extractive Metallurgy.
- Non-Ferrous Extractive Metallurgy.
- Material Testing.
- Mechanical Metallurgy.

AP ECET Mining Engineering Syllabus

- Methods of Working Metal.
- Mine Surveying.
- Mining Machinery 1.
- Elements of Mining.
- Mining Geology.
- Mine Environmental Engineering 1
- Methods of Working Coal.
- Mining Machinery -2.
- Mining Legislation and Management.
- Mine Environmental Engineering 2.

AP ECET Bio-Technology Syllabus

- Basic Industrial Biotechnology.
- Bio-Physics.
- Genetics and Cell Biology.
- Microbiology.
- Enzyme Engineering.
- Bio-Reactor Engineering.
- Molecular Biology Genetic Engineering.
- Plant Bio-Technology.
- Animal Bio- Technology.
- Bio-Informatics.

AP ECET Pharmacognosy Syllabus

- Drug Store & Business Management.
- Pharmacognosy.
- Health Education and Community Pharmacy subjects.

AP ECET Pharmacology Syllabus

- Pharmacology & Toxicology.
- Human Anatomy & Physiology.
- Hospital Pharmacy & Clinical Pharmacy.

AP ECET Syllabus 2019 for Pharmacy

Andhra Pradesh ECET Pharmaceutics Syllabus

- Pharmaceutical Jurisprudence.
- Pharmaceutics I.
- Pharmaceutics II.

AP ECET Pharmaceutical Chemistry Syllabus

- Biochemistry and Clinical Pathology.
- Pharmaceutical Chemistry I.
- Pharmaceutical Chemistry II.

AP ECET 2019 Syllabus for B.Sc. Mathematics

Mathematics

- Differential Equations of the First Order but not of the First Degree.
- Higher-Order Linear Differential Equations.
- Elements of Number Theory.
- Binary Operations.
- Differentiation.
- Riemann Integral.
- Polynomials.
- Vector Spaces.
- Vector Differentiation.
- Vector Integration.
- The Plane.
- The Sphere.
- Real Numbers.
- Sequences and Series.
- Limits.
- Continuous Functions.
- Isomorphism.
- Groups of Cosets.
- Normal Subgroups and Factor Groups.
- Differential Equations of First Order and First Degree.
- Linear Transformation and Matrices.
- Systems of Linear Equations.

- Determinants.
- Permutations.
- Cyclic Groups.
- Homomorphisms.

Analytical Ability:

- Sequences and Series.
- Date, Time and Arrangement Problems.
- Data Analysis.
- Coding and Decoding Problems.
- Data Sufficiency.

Communicative English

- Error Analysis.
- Usage.
- Rearrangement of Parts in Sentences.
- Functional English.
- Reading Comprehension.
- Grammar.
- Vocabulary.