

INFORMATION BROCHURE

Academic Session: 2018-19



Rajkiya Engineering College Bijnor

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VISION & MISSION OF THE INSTITUTE

Vision

To promote excellence in the field of Engineering and Technology by nurturing human resources and intellectual minds.

Mission

- To develop innovative and competent engineers for the growth of industry and society.
- To create an environment in which innovative ideas, research and consultancy develop and from which the innovators of tomorrow emerge.
- To address problems faced by the state and the country through the talent we nurture.
- To serve the community and nation through the use of local resources through continuing education for professionals working in industry
- To encourage dissemination and discovery of knowledge in an atmosphere of scientific freedom.
- To develop a nexus with rural development mainly by way of involvement in technology based solutions for problems in rural areas.

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DIRECTOR'S MESSAGE

It is a matter of great pleasure for me to introduce Rajkiya Engineering College Bijnor as an Institute of State importance. It aims to provide various Engineering disciplines – Information Technology, Electrical Engineering, Civil Engineering, Mechanical Engineering and Computer Science for advance learning and dissemination of knowledge. Rajkiya Engineering College Bijnor is running at Chandpur, District-Bijnor (UP) at the bank of Holy Ganga, where the most advanced facilities with developed infrastructure and latest technologies are available that an Institute of this cadre should have.



It is only possible to develop the Institute into a reputed Institute when we venture seriously and sincerely both at individual and collective levels which may prove a pride for all of us in time to come, and may become a centre of learning and research at the global level. In the present era of globalisation, the Institutions are under tremendous pressure to deliver quality education. Our mission is to produce human resource with creative and innovative ideas, competitiveness with high intellect and professional ethnic values and to impart holistic education along with inculcating high moral values in the students.

The institute has already built a brand name for itself amongst the top newly established Government Colleges. In recent grading of AKTU, our Institute stood first. The institute has already advertised for attracting the best talents from all over the state for its faculty, and, is hoping it will be the very important step towards achieving its vision faster and better.

Prof. B. K. Tripathi M.Tech (IIT, Delhi) Ph.D (IIT,Kanpur)

REGISTRAR'S MESSAGE

We at Rajkiya Engineering College Bijnor offer UG programs of the highest academic standards. Our programs are designed to provide education to students who come from a wide range of educational backgrounds. The students are adaptable to any working conditions making them employable. We at Rajkiya Engineering College Bijnor offer UG programs of the highest academic standards. Our programs are designed to provide education to students who come from a wide range of educational backgrounds. The students are adaptable to any working conditions making them employable.



Here, the students receive education relevant to the need of the local and global industries. We aim at building confident individuals who can adapt to a highly charged competitive environment in a global scenario.

We value the opportunities to share facilities and participate in joint activities such as the extensive academic/ industry programmes, cultural/ art promotion and a regular interaction with the Academicians and corporate executives. With these ongoing activities, we endeavour to improve our students in relation to their grooming and their all round development to face the challenges of the fast changing parameters of international arena.

Shri Naresh Kumar

1. ABOUT THE INSTITUTE

Rajkiya Engineering College, Bijnor (Formerly Dr. Bhim Rao Ambedkar Engineering College of Information Technology, Bijnor) was started by Government of Uttar Pradesh, Department of Technical Education under Special Component Plan (SCP), basically a Plan of the Union Government of India for the promotion of technical education into the socially and economically weaker section of the society. The admission to this College started in the year 2010-2011 with three branches viz., Civil Engineering, Electrical Engineering and Information Technology with an intake of 60 in each branch. As a make shift arrangement the classes of the students admitted to this college were being organised in Harcourt Butler Technological Institute, Kanpur. The Institute is fully financed and managed by Government of Uttar Pradesh and is a financially aided technical Institution. At present the college is functioning as an affiliated college of Dr. APJ Abdul Kalam Technical University, Lucknow and the proposal of the Government is to develop the college as an AICTE approved, independent fully autonomous college, governed by its own well constituted "Board of Governors". The construction work of the College buildings at Chandpur, Bijnor is completed and now the College is fully functional in its own campus from July 2015.

The Institute is running at Chandpur, District-Bijnor (UP), where the most advanced facilities with developed infrastructure and latest technologies are available. The Institute has state-of-the-art infrastructure comprising of laboratories, computer labs, central and departmental libraries, seminar halls, conference halls, administrative area and offices etc.

The Institute has highly qualified and experienced faculty, reputed for their academic achievements and performance. Highly qualified and committed faculty drive the academic, curricular and co-curricular excellence on the campus. Research, innovation, industry institute collaboration and transfer of technology to community are the core thrust areas.

In the present scenario, for the upgradation and modernisation of laboratories we have sent the proposal to DDUQIP. In order to create facility for learning, motivating students for spending quality time in labs, for achieving standards of quality education these modernisations plans are essential. After the implementation of this project, all the laboratories of all the departments will upgrade as per the curriculum of the university.

Technical Education Quality Improvement Program (TEQIP) was envisaged as a long-term program of about 10-12 years duration to be implemented in 2-3 phases for transformation of the Technical Education System with the World Bank assistance. The college has been selected for implementation of TEQIP phase III.

2. Academics

2.1 Academics programs: Under Graduates (B.Tech) Program

Rajkiya Engineering College Bijnor runs 5 undergraduates programs leading to B.Tech degree. Each of these programs is of 4-year duration and each academic year possess 2 semesters. This first year course component of all the programs is common to all branches, and planned to give the students a strong base of the general education in engineering sciences, humanities and applied sciences. The second component of the UG programme is different to all branches, which includes professional courses and a projet in the chosen branch of engineering. The B.Tech Degree is offered in Civil Engineering, Computer Sciences and Engineering, Electrical Engineering, Information Technology and Mechanical Engineering.

(i)	B.Tech (Civil Engineering)	60 Intake
(ii)	B.Tech (Computer Sciences and Engineering)	60 Intake
(iii)	B.Tech (Electrical Engineering)	60 Intake
(iv)	B.Tech (Information Technology)	60 Intake
(v)	B.Tech (Mechanical Engineering)	60 Intake

2.2 Admissions

Institute admits students in its undergraduate 4-years B.Tech Program through U.P.State Engineering Entrance Examination (UPSEE). The admissions against NRI quota seats in B.Tech program is also made through UPSEE (www.upsee.nic.in) conducted by AKTU, Lucknow. For more details regarding notification, eligibility and examination, one may refer AKTU website i.e. www.aktu.ac.in. in addition to this, admissions in B.Tech are made for government nominees from various states, and also for Kashmiri Migrants. Further, direct admissions to 2nd year in B.Tech (for diploma holders and B.Sc. graduates) are made under the lateral entry program through state level entrance examination. If any student cancels its admission then his/her fees will not be refunded. All type of dispute of students would be subjected to Bijnor Judiciary only. For more details about admission, one can refer University ordinances in Annexure-I.

2.3 Infrastructure and Resources

Rajkiya Engineering College Bijnor is spread over green and environment friendly surroundings of land with a total area of 22839.65 sq. metres. In keeping with the Institute's mission, the campus has been designed and constructed bearing in mind aesthetics, environment and ambience conducive to the learning process. The courses offered at various levels seek to build and nurture graduates equipped with strong academic skills, expertise in core discipline and other related disciplines.

a. Computer Centre

The Institute has centralised computing facilities for high end programming and Internet surfing.

- Computer centre administers and manages the entire campus computer network which includes all departments, administrative building, hostels, guest houses etc.
- Entire campus is Wi-Fi. The internet bandwidth is 100 Mbps.

b. Central Library

The Central Library is the hub of information services in the college. It serves as a creative and innovative partner supporting teaching, learning, and research activities. With a fast growing collection, both in digital and print format, currently the Central Library has more than 2,000 books, around 50 CD-ROMs. Besides we have DELNET Discovery Service that provides access to more than 2.5 Crore bibliographic records of Books, more than 40,000 Journals, more than 5,000 E-journals, more than 1,00,000 Thesis/Dissertations etc. in addition to several full text databases as on date. The Central Library's operations and services are fully computerized. For this, we have specialized Library Automation System Software called LIBSIS and is using Bar-Code based computerized circulation system (under process). This software facilitates automated circulation (issue & return) of the resources and speedy access to bibliographies, locations and availability information of the resources stocked in the library. We endeavour to further improve all our efforts to facilitate right information to the right user at the right time.

2.4 Departments

Departments of Civil Engineering

The Department of Civil Engineering was established in 2010 in affiliation with Dr. APJ Abdul Kalam Technical University, Lucknow. The Department offers a four-year course leading to the Bachelors Degree in Civil Engineering. There are 275 students pursuing Bachelors degree in the department. Civil Engineering Program is designed to produce the graduates with sufficient theoretical knowledge, practical experience and design skills that will enable them fit into various areas of engineering practice. This programme offers students a wide range of civil engineering courses such as Analysis and Design of Structures, Geotechnical Engineering, Traffic and Highway Engineering, Water and Wastewater Engineering, and Construction management. The Department is supported by group of faculty members who are subject experts and hail from premier institutions like IITs and NITs.

Academic Program

- B.Tech (4 year Program)
- Students are admitted through UPSEE counseling.
- Intake: 60 students + Lateral Entry Students

Vision

To be a center of excellence for imparting quality education in Civil Engineering and nurturing young minds to make them ethically strong and technically competent engineers to serve humanity.

Mission

- The Department is committed to produce competent Civil Engineers in the current dynamic scenario.
- To promote quality education, research and consultancy for industrial and societal needs.

- To encourage students to pursue higher education and take competitive exams and various career enhancing courses.
- To inculcate moral and ethical values among students.
- To establish coherence between global industrial demand and educational curriculum.

Infrastructure

a. Laboratory and Testing facilities

The Department of Civil Engineering offers modern state of art laboratories with advanced testing facilities for challenging project and research works. The laboratories are well equipped with various instruments and machines which provide in-depth practical understanding about the curriculum to engineering undergraduates.

- 1. Fluid Mechanics Lab
- 2. Transportation Engineering Lab
- 3. Soil Mechanics Lab
- 4. Building Material & Testing Lab
- 5. Structural Analysis Lab
- 6. Surveying & Geo-informatics Lab
- 7. Environmental Engineering Lab
- 8. Hydraulics & Hydraulic Machines Lab
- 9. Computer Aided Design Lab
- 10. Engineering Drawing lab
- 11. Virtual Class room

b. Virtual Class Rooms

Virtual class rooms are equipped with interaction based multimedia devices and other advance facilities to follow the new model curriculum of AICTE, including Visualizer, Trainer tracking Camera, 2 way video conferencing, Big Screen full HD LED TV, Projector, sound system, e-podium etc. In various types of seminars, workshops are conducted for students and faculty members in addition to interactive lecture sessions. Many advanced courses for under graduate students are also available through several online learning platforms.

c. Drawing Hall

Drawing halls are well furnished with various equipment and tools for student to participate in traditional engineering drawing practice and get to know the feel of civil engineering designs.

Department of Computer Science and Engineering

The CS Department is going to be established from July 2018 with 4-years B.Tech. Computer Science program with an intake of 60 students. The Department is started in the current academic year 2018-19 with the admission of its first batch of B.Tech with the sanctioned intake of 60 students. It has highly

qualified, dedicated and committed faculty members to take care of the academic and other requirements of students. Faculty members have published large number of research papers in International and National Journals and Conferences. Faculty members of the departments are planning to engage the students in supervising various live research projects in their respective area of expertise. The department is planning to produce quality software engineers and providing better placement in leading software development organizations of India and Abroad. The Department is also planning to run research project under TEQIP. Besides academic curriculum, students will also be encouraged to take part in various co-curricular activities organized from time to time in this department.

The students are encouraged to acquire knowledge facilities with an integrated thinking about education research & development, application and training. The students are provided knowledge to understand the fundamentals of basic sciences and humanities, inter disciplinary knowledge, innovation, creativity, problem solving abilities, honest and professional ethics, capacity for team work in inter disciplinary, state, national and international environment.

Program

The department offers B. Tech program. Students are admitted through UPSEE counselling. Intake: 60 students + Lateral Entry Students

Facilities

The department under the able guidance of the faculty members look forward to organise seminars and competitions at various levels for the students in the institute in order to provide them a better exposure to Computer Science and allied fields.

Great lab facilities along with projectors, Power Backup and internet connections on each computer make the institute a bit ahead to compete with other colleges.

All the computing resources of the Institute are connected through a huge LAN connection and wifi, Library, Biometric enabled Attendance, Grants through various funds like TEQIP III.

Infrastructure

Computer labs: With latest workstations (i7, 1 TB Hard Disk, 8 GB Ram), LAN facilities, Projectors, AC and updates softwares.

Smart Class: Smart class with multimedia and other advance facilities to follow the new model curriculum of AICTE, including Projectors, sound system, e-podium etc.

Department of Electrical Engineering

The Electrical Engineering Department, Rajkiya Engineering College Bijnor offers B.Tech. program in Electrical Engineering (EE). The programs are designed and updated keeping in view the constantly changing industrial needs, skills to be developed, and challenges emerging out of new research. The programs are well – received by the industry and academia as well. The department emphasises towards imparting quality education, rigorous teaching-learning, hands-on expertise and helping students to shape their all-round personality.

The Department with its strong pool of faculty, well-developed laboratories, latest software and hardware facilities, contributes to develop life-long learning skills to its graduate students. The department is actively involved in funded research projects apart from offering design, analysis and testing based consultancy work to relevant industries.

The Electrical Engineering program is very well equipped with laboratory facilities and constantly upgrading available hardware and software to create conducive teaching-learning, and research / testing environment leading to a great opportunity to learn and progress in different technical domains. Some of the faculty members have obtained their Ph.D. from NITs, IITs and IISc, whereas some are undergoing their doctoral research.

The areas of Electrical Engineering Department are - Power Electronics & Drives, Power Systems Engineering, Electrical Machines, Switchgear & Protection, High Voltage Engineering, Control System & Instrumentation, Electrical Networks and Electrical measurements.

The Department offers four year B.Tech Program to the sanctioned intake of 60 undergraduates.

Lateral entry seats available in the department are 12.

Vision

To achieve excellence in the field of Electrical Engineering by inculcating research activities in technocrats to meet the industrial and social needs for the holistic development of the nation.

Mission

- 1. To provide an academic environment galvanised from progressing technologies and innovations.
- 2. To impart technical skills in the students by practical exposures and industrial based learning.
- 3. To develop R&D facilities for industrial readiness of technocrats.
- 4. To infuse moral values and professional ethics for leadership and teamwork quality.

Program Educational Objectives (PEOs)

The Program Educational Objectives of UG in Electrical Engineering are:

- 1. Graduates of the program will apply skills and knowledge of Electrical Engineering to solve the problems of social, environmental and industrial relevance.
- 2. Program graduates will engage in analysis and design of systems, tools and applications in the field of Electrical Engineering.
- 3. Program graduates will work effectively in team as well as individually in the interdisciplinary areas.
- 4. Program graduates will engage in lifelong learning, career development and adapt to evolve societal and environmental needs maintaining professional ethics.
- 5. Program graduates will apply the basic reasoning to address the socio-cultural consideration and the impact of Electrical Engineering solutions for above areas and environmental sustainability.

Program Outcomes (POs)

The Program Outcomes of UG in Electrical Engineering are:

- 1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems in electrical engineering.
- 2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. **Design/development of solution**: Design solutions for complex engineering problems and design system components or processes of Electrical engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. **Conduct investigates of complex problems:** Use research-based knowledge and research methods including design of experiments in electrical engineering, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities in electrical engineering with an understanding of the limitations.
- 6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice in electrical engineering.
- 7. **Environment and sustainability:** Understand the impact of the professional engineering solutions of electrical engineering in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. **Individual and team work:** Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

Facilities:

- 14 Well Equipped Laboratories
- Internet Facility
- Biometric Enabled Attendance
- Virtual Class Room
- Projectors
- Advanced Numerical Technique Laboratory
- Students internships and training through funds from TEQIP-III and DDUQIP schemes

Laboratories:

Department of Electrical Engineering currently offers fourteen laboratory courses to Engineering undergraduates. The laboratories are well equipped with various experimental kits which provide indepth knowledge about the curriculum. Along with experimental kits based experiments, undergraduates also learn various soft computing techniques, which help them to solve recent problems.

The laboratories in Department of Electrical Engineering are:

- 1. Electrical Engineering Lab
- 2. Network Lab
- 3. Electronics Lab
- 4. Numerical Technique Lab
- 5. Electrical Measurement and Instrumentation Lab
- 6. Electrical Machines I and II Lab
- 7. Digital Logic Design Lab
- 8. Power Electronics Lab
- 9. Control System Lab
- 10. Microprocessor Lab
- 11. Power System Lab
- 12. Electrical CAD Lab
- 13. Electrical Drives Lab
- 14. Analog and Digital Communication Lab

Research Facility:

The Department of Electrical Engineering is in the process of developing Research and Development Lab. The lab will have DSPACE, semikron inverter set, power quality analyser, and software like MATLAB, LABVIEW, which will give the way to perform high class research in the field of electrical machine control and power system.

Department of Information Technology

The Department of Information Technology was established in 2010 and is affiliated to Dr. APJ Abdul Kalam University, Lucknow. The Department runs 4 years B.Tech Programme with an intake of 60 students. The students have an in-depth exposure to computing environment consisting of state-of-the-art laboratories. The IT Department is supported by a group of faculty members who are subject experts and hail from premier institutions like IITs and NITs.

Vision

To achieve excellence in education, research and services adhering to professional standards with latest trends of technology in society together with the attitude of ethical values and entrepreneurial skills.

Mission

- 1. To move from the role of a teacher to a mentor.
- 2. To develop the intellectual competency and out of the box thinking among the young minds.

- 3. Instead of just academic knowledge, we aim to induce curiosity, capabilities to learn, analyse, infer and prototype.
- 4. Introduce new research areas to the budding technocrats in the second year of their course; providing them training grounds. This practice is to be followed till the final year enabling them to come up with novel solution to the emerging issues in the domain.
- 5. To produce IT professionals with sound understanding of the concepts in the domain and the proficiency to meet the agile industry demands.
- 6. Motivation and support to the next generation that can lead to socio-economic development.

Course Offered

- B.Tech (4 year Programme)
- Students are admitted through UPSEE counseling
- Intake: 60 students + Lateral Entry Students

Facilities

- Internet facility: High Speed LAN, Wifi
- Power Backup in Labs
- Library
- Biometric enabled Attendance
- HD Projectors
- Innovative Environment
- Grants through various funds like TEQIP, DDUQIP

Infrastructure

Computer labs with state-of-the-art Computer Systems with UPS facilities for power backup are available. In all the systems up-to-date software are installed for performing experiments and assignments of different classes/subjects.

a. Virtual Class & Smart Class

Virtual & smart class with interaction based multimedia devices and other advance facilities to follow the new model curriculum of AICTE, including Visualizer, Trainer tracking Camera, 2 way video conferencing, Big Screen Full HD LED TV, Projector, sound system, e-podium etc. In the class various types of seminars and workshops are conducted for students and faculty members in addition to interactive lecture sessions. In addition to this distance learning features are also available.

b. Upcoming Laboratories

• Artificial Intelligence Laboratory

Artificial intelligence (AI), sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals. A recent report by Pearson deciphers how artificial intelligence will positively transform education in the coming years. The name "artificial intelligence" covers a lot of disparate problem areas, united mainly by the fact that they involve complex inputs and outputs that are difficult to compute. One of the most interesting such areas is sensor-controlled behaviour, in which a machine acts in the real world using information gathered from sensors such as sonars and cameras. This is a major focus of A.I. in recent research. AI has the power to spur creativity, engagement and stronger learning outcomes among the students.

• Internet of Things Laboratory

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. IoT is the network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators, and network connectivity which enables these objects to connect and exchange data. Each thing is uniquely identifiable through its embedded computing system but is able to inter-operate within the existing Internet infrastructure.

Some of the most popular IoT Applications include Smart home, Wearables, Smart City, Smart grids, Industrial internet, Connected car, Connected Health (Digital health/ Telehealth/ Telemedicine), Smart retail, Smart Waste Management, Smart Parking etc. The lab can enable students to work on output centric projects

Research

The department focuses on research oriented projects in many areas like AI, IOT, Big Data etc. so that students can enhance their knowledge in developing real world projects to help the society. Research and development is trending things in IT.

Department of Mechanical Engineering

The department of Mechanical Engineering established in 2018. The department has well developed laboratories with all essential facilities for running undergraduate programme. Graduate engineers of the department are suitably groomed in latest developments in Mechanical Engineering apart from the traditional knowhow. Curriculum is regularly revised for including the latest developments in it. The Department has committed, experienced and well qualified faculty members for taking care of the academic and other requirements of the students of the department. The extracurricular activities will be regularly organized by the students under the aegis of Association of Mechanical Engineers for their overall

developments. Under TEQIP III and DDU QIP program of RD, Government of India various new equipments have been added to strengthen the laboratories of the department.

Department of Applied Sciences, Humanities and Management

The department of Applied Sciences Humanities and Management of Rajkiya Engineering College Bijnor focuses on the creation and application of knowledge in the disciplines of Physics, Chemistry, Mathematics, English and Management. The department was established in 2010 and the department has been running to support the B. Tech program. The department under the dynamic guidance of Director, Prof. Bipin Kumar Tripathi and leadership HOD, Dr Priyanka is focused to turn students into outstanding professionals. The faculty members are well qualified with masters/doctorate from institutes of repute like IIT and NITs (IIT (BHU), IIT Roorkee, NIT Allahabad, G B Pant Nagar University, Delhi University, Rohilkhand University). The faculty members also have a number of national and international publications, books and patents to their credit. The Department equips students with technical knowledge, skill and ability; motivating them to think creatively, helping them to act independently and take decisions accordingly in all their scientific pursuits and other endeavours. The Department has well-equipped labs like Physics Lab, Chemistry Lab, Language lab with latest modern technology and Smart Class etc.

Objective

To be a centre of knowledge acquisition, innovation in technical education field, research work and social contribution.

Vision

The objective of the department is to cater students to pursue both intellectual growth and professional development to motivate and inspire the students to have a strong background in basic science for the engineering curriculum and to feed the budding engineer with fine aspects of science, which make them to understand, endeavour, innovate and contribute to the technological advancement of tomorrow.

Mission

The department is committed to teach students to question critically, think logically, communicate clearly, and live ethically which gives encouragement to the students by giving the latest development in science so that they can enterprise it for development of technology and to investigate the researcher in a student so that he will be an inventor of tomorrow.

Chemistry Lab

The department has a well equipped chemistry laboratory to cater for prescribed experiments at B.Tech 1st and 2nd semester curriculum. It acquaints students to the basic principles of chemistry so that they could analyse the need, design and perform a set of experiments. Laboratories are well equipped with latest instruments like spectrophotometer, digital pH meter, water generating unit, muffle furnace etc. The objective is to develop and practice observational skills.

Physics Lab

The Department of Physics makes persistent endeavors to help its extra inquisitive learners to attain deep insights into this ever happening discipline and the requisite expertise for new ventures by dint of quality teaching, experimental activities in its ultra modern labs and freedom of enunciating innovative thoughts at their disposal for research work following the international conventions.

Language Lab

The Professional Communication Lab enhances the interpretative and expressive skills of students in an intellectual environment that is stimulating and nurturing. It equips students with both a rigorous knowledge of the subject as well as critical and analytical ability. The English language program aims to help students develop the capacity for critical enquiry into various aspects of the study of language and acquire specialized knowledge about the structure, development and function of English.

Objective

- Digital language lab provides resources and facilities for language instruction and learning.
- It is interactive software based multimedia learning system that is used for imparting effective language learning pace and convenience.
- It aims at mitigating stage fear, enthusing sensible talking to the public and raising a commanding and complete personality among the practitioners of English language.
- The students are trained on the voice pattern to modulate their voice in accordance with the needs of the occasion.
- Drilling students to speak confidently with correct pronunciation.
- Students are trained according to the British accent.
- To instil a sense of confidence among the students.
- Improvement of soft skills.

Training and Placement Cell

At Rajkiya Engineering College, we emphasize on the all-round development of our students, thereby equipping them to face competitive and challenging life after college with an ease. The soft skills training provided to students assist them in identifying and achieving their real potential. To make our students corporate ready in all respect, Training and Placement Cell emphasizes on laying a firm foundation by focusing on Communication Skills, Personality Development, Presentation Skills, Goal Setting, Confidence Building, Interpersonal Skills, Team Building, Interview Skills, Group Discussions, Business Etiquette, Work Ethics and Aptitude Ability.

Training and Placement Cell deals in Placement of students with a dedicated team of highly qualified faculty members.

It interacts with renowned organizations all over India for inviting reputed corporate houses and industries for final placements of our students. We help every student to identify his/her career interest through individual counseling by experts. We provide regular feedback from industry experts to our students so that they may take the challenges of today's ever changing business environment.

Vision

Eliciting the young brains with relevant subjective as well as technical knowledge to get them a bright future ahead.

Mission

Our mission is to place all the eligible students at the right place. We wish to get the right job to right candidate to make their placement successful.

2.6 Examination

The examinations are conducted by Examination Committee, Rajkiya Engineering College, Bijnor. The evaluation process of the students is based on the concept of continuous assessment and evaluation, and it has two components i.e. the sessional and the end semester theory exam. The distribution of marks for sessional, end semester theory papers, practicals and other examinations, seminar, project, industrial training and general proficiency shall be as prescribed in scheme of evaluation and criteria by AKTU, Lucknow.

Examination Committee:

Name	Designation
Er. Ankit Singh	Controller of Examination (CS)
Er. Pushp Maheshwari	Deputy Controller of Examination (DCS)
Er. Rachit Kumar	Joint Controller of Examination (JCS)

2.7 Fees

The year wise fee structure for academic session 2018-19 is as follows:-

S. No.	Fee details	Ist year & Lateral entry	IInd year	IIIrd year	IVth year	
1	Tuition Fee	Rs.40,000/-	Rs.40,000/-	Rs.40,000/-	Rs.40,000/-	
2	University Enrollment Fee					
3	University Exam Fee					
4	Student Welfare Fund	7500	7500	7500	7500	
5	University Development Fee	7300	7300		7300	
6	Degree Fee					
7	Migration & Transcript					
8	Security Deposit (Refundable)	Rs.5000/-	Rs. Nil	Rs. Nil	Rs. Nil	
9	Alumni Fee	Rs.1000/-	Rs. Nil	Rs. Nil	Rs. Nil	
10	Other Institute Fee	Rs. 5850/-	Rs. 5850/-	Rs.5850/-	Rs. 6350/-	
11	Medical Insurance Premium	Rs. 330/-	Rs. 330/-	Rs. 330/-	Rs. 330/-	
	Total Rs.	Rs. 59,680/-	Rs.53,680/-	Rs.53,680/-	Rs.54,180/-	
1	Hostel Fee (Per Year)	Rs.10,750/-	Rs.10,000/-	Rs.10,000/-	Rs.10,000/-	
2	Mess Charge (@ Rs. 14000/- Per Semester)	Rs. 28,000/-	Rs. 28,000/-	Rs. 28,000/-	Rs. 28,000/-	

2.8 FINANCIAL ASSISTANCE TO STUDENTS

State Government has a policy to permit the admission of students having annual parental income less than, **Rs. 2.00 Lac for SC/ST/OBC/GEN/Minority category** students to be registered with rebate in tuition fee or without fee as per condition given hereunder:

Category	Fee Concession/Rebate Available
Schedule Caste Student	Full fee exemption
Schedule Tribe Student	Full fee exemption
Other Backward Caste Student	As per Govt. Order the amount of scholarship will be transferred
General Category Student	directly to the respective a/c of the eligible students. Hence all the students of other than SC/ST category have to deposit total balance fee at the time of registration.
Minority Student	

Fee Concession Available for "FW" Category

All candidates admitted under Fee Waiver (FW) category are entitled for exemption from payment of tuition fee i.e., Rs. 40,000.00 for all B.Tech branches.

2.9 ATTENDANCE

Attendance Policy

This policy emphasises the correlation between attendance and academic achievement.

- Every student is required to attend all the lectures, tutorials, practicals and other prescribed curricular and co-curricular activities. The attendance can be condoned up to 25% on medical grounds or for other genuine reasons beyond the control of students.
- A further relaxation of attendance up to 15% for a student can be given by Head of Institution/college provided that he/she has been absent with prior permission of the Head of the institution/college for the reasons acceptable to him/her.
- No student will be allowed to appear in the end semester examination if he / she does not fulfill the overall average attendance requirements.
- The attendance shall be counted from the date of admission in the college or start of academic session whichever is later.

2.10 CURRICULUM REQUIREMENT

The first component of these programmes is the core program common to all branches and planned to give the students a strong base of the general education in engineering sciences, humanities and applied sciences. The second component of the UG programme includes professional courses and a project in the chosen branch of engineering.

2.11 COURSE STRUCTURE

		SEMESTER	1	-									
S No.	Code Subject	Periods		Evaluation Scheme			eme	e End Semester		Tatal	Casta		
0 110.	subject		L	T	P	CT	TA	Total	PS	TE	PE	Total Credit	
1	KAS101/KAS102	Physics/Chemistry-I	3	1	3	30	20	50	25	100	25	200	5.5
2	KAS103	Mathematics I	3	1	0	30	20	50		100		150	4
3	KEE101/KCS101	Electrical Engg/Programming for Problem Solving	3	1	2	30	20	50	25	100	25	200	5
4	KCE101/KWS101	Engineering Graphics & Design/Workshop Practices	1	0	4	-	•		25		25	50	3
												600	17.5
		SEMESTER	11						_				
C No	Code		-	Period	ls	Eva	uatio	n Sche	me	End Se	mester		
S No.	Code	SEMESTER Subject	-	erioo	ls P	Eval CT		n Sche Total	A CONTRACTOR OF	End Se TE	mester PE	Total	
S No. 1	Code KAS201/KAS202		-	Period T					A CONTRACTOR OF	a broad side was been as	and the second data	Total 200	
S No. 1 2	1550.000	Subject	I L	Period T 1		CT	TA	Total	PS	TE	PE	Iotal	Credi
1	KAS201/KAS202	Subject Physics/Chemistry-I	I L 3	Period T 1 1	P 3	CT 30	TA 20	Total 50	PS 25	TE 100	PE	1 otal 200	Credi 5.5
1 2	KAS201/KAS202 KAS203	Subject Physics/Chemistry-I Mathematics II	I 2 3 3 3	Period T 1 1 0	P 3 0	CT 30 30	TA 20 20	Total 50 50	PS 25	TE 100 100	PE 25 -	200 150	Credi 5.5 4
3	KAS201/KAS202 KAS203 KEE201/KCS201	Subject Physics/Chemistry-I Mathematics II Electrical Engg/Programming for Problem Solving	I 2 3 3 3	T 1 1	P 3 0 2	CT 30 30 30	TA 20 20 20	Total 50 50	PS 25 25	TE 100 100 100	PE 25 - 25	200 150 200	Credit 5.5 4 5

Course structure for B. Tech First Year (Common to all branches)

*List of MOOCs (NPTEL) Based Recommended Courses for first year B.Tech students

- 1. Developing soft skills and personality
- 2. Enhancing soft skills and personality

*AICTE Guidelines in Model Curriculum

A range of credits from 150 to 160 for a student is required to be eligible to get Under Graduate degree in Engineering. A student will be eligible to get Under Graduate degree with Honours or additional Minor Engineering, if he/she completes in additional 20 credits. These additional credits could be acquired through MOOCs. The student shall be awarded honours degree only if he/she secures 7.50 or above CGPA and passed each subject of that degree program in single attempt without any grace marks.

2.12ACADEMIC CALENDAR

		Dates			
S. No.	Particulars	Odd Semester	Even Semester		
		For I, III, V, VII & IX Semester	For II, IV, VI, VIII, & X Semester		
1	Commencement of Classes session 2018-19	August 1, 2018	Jan.21, 2019		
2	Last date of submitting admission list of students to University (for newly admitted student)	Aug. 31, 2018			
3	Last date of submitting Enrollment form /Exam Form for regular & carry over exams.	Oct. 31, 2018			
4	Last date of Submitting Examination fee for both semesters and examination/carry over examination fee	Nov. 15, 2018			
5	Last date of submitting sessional marks of Theory & Practical Sessional to University.	Dec. 10, 2018	May 11,, 2019		
6	End Semester Theory Examination	Dec. 11, 2018, to Jan. 05, 2019	May, 12, 2019 to May 30, 2019		
7	End Semester Practical Examination	Jan, 06 2019 to Jan. 12, 2019	May 31, 2019 to June 06,, 2019		
8.	Last Date of Submission of PE Mrks.	Jan. 15, 2019	June 15, 2019		
9.	Evaluation of Answer sheets	Dec. 16, 2018, to Jan. 15, 2019	May 16, 2019 to June 15, 2019		
10.	Summer Training		June 07, 2019 to July 20, 2019		
11.	Winter Vacations/ Summer Vacation	Jan. 13, 2019 , to Jan 20, 2019	June 07, 2019 to July 20, 2019		
12.	Commencement of Classes session 2019-20	For I, III, V, VII & IX SemesterAugu	st 01, 2019		

3. STUDENT DISCIPLINE

Institute Timings

The official timings for academic activities of the Institute is from 09.00 hrs to 17.00 hrs (Monday to Saturday). Any change in these timings is duly notified. The students are advised to see the notice boards and Institute's website regularly. The time table/ class schedule is also displayed on the notice boards.

General conduct

Each student shall conduct himself, both within and outside the institute, in a manner befitting the traditions of this institute. Ragging in any form, inside or outside the institute is strictly prohibited. In case of any act of ragging, indiscipline, vandalism and loss to the institute's property necessary disciplinary action is taken by the Proctorial Board of the institute. The Dean, DSW and Wardens are responsible for welfare related issues of all students of the institute. The students can also approach the concerned Head of Departments/ Wardens for solution to their problems and guidance.

Standing orders for students

Students of the institute should go through these standing orders carefully and make them familiar with the rules, regulations and other instructions. Apart from the standing orders mentioned here they have to abide by the notices/ orders issued from time to time, pertaining to their academic curriculum and other activities. Any amendments and additions to these standing orders will be notified through notices displayed on the notice boards and circulated in the usual manner. In case of any difficulty or requiring assistance, they should contact the authorities concerned as indicated in these orders. The plea of ignorance will not be entertained for any breach of orders in force from time to time. Apart from academic work they are expected to take full participation in other student's activities also.

Students having attendance less than 75% or as decided by Institute/ University will not be eligible for appearing in class test and End Semester Examination. They may be debarred from placement interviews for which they themselves shall be responsible.

Proctorial Board

The Proctorial Board of the Institute will investigate all the alleged misdemeanour reported and with the consent of Director Board shall recommend suitable punishment. Violation of the code of conduct of students, by a student or a group of students can be referred to the Chief Proctor's office by any student, teacher and staff member of the institute.

In case of any act of ragging, indiscipline, vandalism and loss to the institute's property necessary disciplinary action is taken by the Chief Proctor/ Proctorial Board of the institute. The DSW, Wardens, Security Officer, Dean and Assistant Dean are responsible for welfare related issues of all students of the institute. The students can also approach the concerned Head of Departments/ Security Officer/ Wardens/ Dean and Assistant Dean (Student Welfare) for solution to their problems and guidance.

S. No.	Name	Designation
1.	Dr. Pravesh Kumar	Chief Proctor / Dean (Academics)
2.	Dr. Ashu Tomar	Assistant Chief Proctor
3.	Dr. Hemaunt Kumar	Dean (Student Welfare)
4.	Dr. Navneet Kumar	Security Officer

Conduct of discipline

- 1. No student is expected to indulge in any activity, which tends to bring down the prestige of the Institute. Each student shall show due respect and courtesy to the teachers, administrators, officers and employees of the Institute, and good neighbourly behaviour to fellow students. They should also pay due attention and courtesy to the visitors and residents of the campus.
- 2. Lack of courtesy and decorum; unbecoming conduct (both within and outside the Institute); wilful damage or removal of Institute property or belongings of a fellow student; disturbing fellow students in their studies; adoption of unfair means during examinations; breach of rules and regulations of the Institute; noisy and unseemly

behaviour and similar other undesirable activities shall constitute violation of the Code of Conduct of students.

- 3. Violation of the Code of Conduct by any student shall invite disciplinary action and may lead to punishment, such as reprimand, fine, being debarring from examination, debarring from the placement, cancellation of registration and even dismissal from the Institute.
- 4. The wardens of the concerned hostel shall have power to reprimand or impose fine against any resident of the hostel who violates either the rules and regulations or the code of conduct pertaining to the concerned hostel. Wardens can also take any other suitable actions in consultation with Dean of Students Welfare and Proctorial Board as required.
- 5. Students will not be permitted to appear in any other formal course/ examination during their stay at the Institute except with the written permission of the Director.
- 6. Use of liquors, drugs or any other intoxicants in the Institute premises including hostels is strictly prohibited.
- 7. Students are warned incurring debt or committing irregularities in money matters. All cases and issues which lead to discredit to the Institute will warrant disciplinary action. The Institute, however, will not be responsible for debts, in any way.
- 8. Students must pay their entire Institute, Mess and other dues before the stipulated dates. Failure to deposit the dues in time may result in fine or any such other penalty as deem fit.
- 9. Students must carefully handle the laboratory equipments, instruments, machines and plants which they have to use in the course of their study. The students will be penalized of writing anything on walls, chairs, tables, desks and black boards. Pasting unauthorised notices is improper and is strictly prohibited.
- 10. Any get together outside the Institute campus including outings, picnics, and visit to lakes/rivers etc. for any reason is strictly prohibited without prior permission.
- 11. Students are neither allowed to become members of outside non-academic societies nor to join discussion of a political nature and to take part in any political activity, outside the institute.
- 12. Students are not allowed to use mobile phones in Institute premises during Institute hours.
- 13. Students are required to always carry their Identity Cards/ Registration Cards in the Institute premises.

Anti-Ragging Measures

Ragging is a reprehensible act, which does no good to anyone. The cause of indulging in ragging is deriving a sadistic pleasure and showing off power, authority or superiority over juniors, which is highly undesirable. No act of ragging shall be tolerated, and any act of ragging shall not go unnoticed and unpunished.

Broadly speaking, Ragging is: any disorderly conduct by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness any other student, indulging in rowdy or in disciplined activities which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in a fresher or a junior student or asking the students to do any act or perform something which such student will not

do in the ordinary course and which has the effect or causing or generating a sense of shame or embarrassment so as to adversely affect the physique or psyche of a fresher or a junior student.

It is right, as well as an obligation of all the students to fight against ragging. Any instance of ragging to which they are subjected, or which comes in their knowledge should forthwith be brought to the knowledge of the authorities. It shall be promptly dealt with while protecting the complainants from any harassment by perpetrators of ragging.

Ragging is banned in the institute. Anyone indulging in ragging will be punished appropriately along with filing a First Information Report (FIR) with the local police authorities. The punishment may include:

- Outright expulsion from the institute.
- Barring from appearing in placement interviews.
- Withholding results, scholarships or other benefits.
- Fine with a public apology.
- Suspension from the classes for a period.
- Suspension from the institute for a period.
- Suspension or expulsion from hostel or mess.

Also, the punishment to be meted out will be exemplary and justifiably harsh to act as a deterrent against recurrence of the incidents of ragging. In every single incidence of ragging where the victim or his parent/ guardian is not satisfied with the institutional arrangement for action, a FIR will be filed. Besides, the Migration Certificate/ Character Certificate shall have an adverse entry apart from that of general conduct and behaviour whether the student had participated in and in particular was punished for ragging. In case the applicant for admission is found to have indulged in ragging in the past or if it is noticed later that he has indulged in ragging, admission may be refused or he shall be expelled from the Institution.

Attention

According to the Uttar Pradesh Prohibition of Ragging in Education Institutions Act, 2010 (U.P. Act no. 14 of 2010, as passed by the Uttar Pradesh Legislature), "Whoever directly or indirectly commits, participates, abets or propagates ragging within or outside the campus shall be punished with imprisonment of either description for a term which may extend to two years or with fine which may extend to ten thousand rupees or both. Any student convicted of an offence shall not be admitted in any educational institution for a period which may extend to five years.

4. Hostel and Mess Rules

a. Hostel Rules

- 1. The Wardens of the hostel shall be responsible for managing the hostel efficiently. In every hostel, there will be a Hostel Management Committee (HMC), nominated by the Warden for smooth running of the hostel. The HMC comprises of :
 - a. General Secretaryb. Prefects on every 20-25 students
- Secretary Member

c. Mess Secretary	Member
d. Sports Secretary	Member
e. Common Room Secretary	Member
f. Cultural Secretary	Member
g. Maintenance Secretary	Member

However, Wardens can also constitute specific committees/subcommittees for specific purpose.

- 2. Boarders must look up the Hostel Notice Board regularly. The Warden Team member or any authorized member of the Institute staff can inspect the room of any student in the hostel at any time. Hostel inmates are supposed to keep I-cards with them and must present the same to any hostel or institute authority whenever asked for. Students must always carry their Identity Cards with them.
- 3. No Boarders should see the Director for ordinary matters. Warden In-charge of the concerned hostel is the right person for such matters. In next step they can approach to the Dean (Student Welfare).
- 4. Within and outside the hostel the residents should not do anything which may cause noise and distraction in studies or may be deemed vulgar in any way.
- 5. No unauthorized person is allowed to stay at night (9:00 PM to 6:00 AM) in the hostel without prior permission from the Warden. If this is not possible for some urgent reason the warden should be informed the following morning explaining full reason for the delay in receiving prior permission. No female guest is allowed to stay in the boy's hostel and vice-versa under any circumstances either during day or at night.
- 6. Every student who has been granted hostel accommodation must reside in the accommodation allotted to him/her. Students should not interchange hostel or rooms in the same hostel without prior consent of the Warden.
- 7. Furniture provided in the room should not be removed and used elsewhere.
- 8. Every resident is required to be present in the hostel during night (9:00 PM to 6:00 AM). Absence from the hostel without prior written permission from the Wardens is an offence.
- 9. Residents are encouraged to have Personal computers in the hostel, but strictly for academic purpose. Light must be switched off when not in use. The use of electric heater, electric rod and other similar appliances are prohibited. Boarders are warned against tempering with electric installation and for all electric repairs the electrician should be called in
- 10. The Hostel inmates will refer their difficulties to the General Secretary or the Prefect concerned who will take necessary action in consultation with the Warden.
- 11. The hostel mess will be run by students under the general supervision of the Warden. The

inmates are required to follow the mess rules strictly.

- 12. Every student residing in the hostel shall join the hostel mess. Individual cooking is not permitted. They are not allowed to cook anything in their rooms. However, the wardens may exempt an individual student from the hostel mess on medical grounds for a specified period.
- 13. No meetings/Associations are permitted in the hostel unless prior permission of the Warden taken stating the nature and scope of the meeting.
- 14. Hostel inmates are supposed to take care of their health themselves. In case of any medical urgency student should inform the Hostel Warden who will make necessary arrangement for their treatment. Student suffering from infectious disease has to leave for medical treatment to proper clinic/hospital or isolated place.
- 15. Gambling of any kind and use of liquor/drugs of any variety is strictly prohibited.
- 16. No student should keep any fire-arms, lethal weapons, poisonous things or intoxicants of any kind in the Hostel. Students must not take law into their own hands, but must report all disputes to the hostel Warden In-charge/Warden. All kinds of shouting, fighting, gambling, stealing, violet knocking, maltreating or abusing are strictly prohibited. In such cases offender will be handed over to Police immediately.
- 17. All hostels are required to be vacated during the summer vacation. Before proceeding on vacation students must handover charge of their rooms, furniture, fittings, etc. The Warden is authorized to break/open a locked room. No responsibility will be accepted by the Institute for the private belonging of the student concerned found in these rooms.
- 18. The inmates of the hostel will not leave the hostel premises on holidays for the purpose of excursion or picnic etc. Prior permission of the Warden Incharge/Warden has to be obtained for going for any picnic or excursion etc. However for any eventuality that may occur during picnic/excursion, etc. the responsibility does not lie with the Institute authorities.\
- 19. Common room shall be available to the hostellers from the morning to 10:00 PM in the night. After 10:00 PM it will be closed and the key will be placed with common room secretary. In case of any specific event, the timings for common room may be extended with the prior written permission of the Wardens.
- 20. Students, in their own interest, are advised not to keep excess cash or any valuables in their hostel rooms. They are cautioned to be very careful about safety of their belongings. They should **close** their rooms securely when they leave the room even for short periods or when they are sleeping. Institute shall not be responsible for the loss of such items due to theft or otherwise. However, in the case of theft, the matter should be immediately

reported to the concerned Warden In-charge/Warden and Security Officer (SO) of the Institute.

- 21. Ragging in any form is a cognizable offence and severely punishable as per the Supreme Court directives leading to expulsion from the Hostel and the disciplinary action may culminate in her expulsion from the Institute as well. The Institute administration may report incidents of ragging to the Police for taking appropriate action under the law.
- 22. Formation of association of students on the basis of regions, caste or creed is not permitted, during their stay in the hostels.
- 23. Male students are strictly forbidden from entering the Girls' Hostel and female students from entering Boy's Hostel.

The working of the hostel is controlled by the Dean of student welfare (DSW), who is also the chairman of the council of Hostel activities.

Additional Rules for Girls' Hostel:

- 1. Closing time is 7:00 PM in summer (April to September) and 6:00 PM in winter (October to March).
- 2. The girl students must make entry in the "In/Out Register" kept at the Girls' Hostel.

Mess Rules

Each student will deposit a sum of Rs. 28000.00 (Twenty Eight Thousand Only) for an academic year at the time of registration or allotment of room in the hostel as a Mess advance. At the end of year the Mess Manager will prepare the account of the student with the help of hostel committee members. If there is balance amount in favour of the student, it will be refunded to him/her and no dues will be given to student by the warden. In case of extra charges on the student's account, it should be paid by the student for getting no dues from the warden.

- 1. The mess will be run by the students under the general supervision of the wardens. An executive committee consisting of elected or nominated members will be formed for the management of the mess. The duties and responsibilities will be divided among the members of the committee for smooth running of the mess
- 2. The Executive Committee shall consist of the following;
 - a. Mess Secretary
 - b. Mess Manager

c. Mess Manager's nominee. In case of double and triple seated rooms, the nominee shall be the roommate or one of his roommates.

d. Mess Committee Members on every 40 students.

- e. Outgoing Mess Manager.
- 3. The list of Mess Managers for the whole session shall be prepared by the Warden in the beginning of the academic year. Each Mess Manager and his/her nominee and mess committee members shall hold office for one month.
- 4. The mess Manager will prepare the account with the help of the committee members and circulate it within 3 days of the closure of the month.
- 5. Every resident must pay the mess bill by the due date, announced by the Warden. Failure to deposit the dues in time may result in fine or such other penalty as the warden may deem fit.
- 6. Only full day Mess offs can be allowed to such residents who have taken prior station leave permission from the Wardens provided the application for mess offs is received by the mess manager at least two days in advance.
- 7. Guest will be charged according to the number of diets and/or Breakfast taken as per the charges fixed by the mess committee from time to time.
- 8. Guest will not be normally allowed to take meals for more than 3 consecutive days unless the host has taken prior permission from the hostel Warden.
- 9. Outsiders i.e. those not residing in the hostel cannot normally become a member of the mess. However, the Warden is empowered to allow outsiders to take meals in the mess for a brief period only. Outsiders mean non-hosteller Institute students or ex-hostellers or member of the staff.

5. CENTRAL FACILITIES

Hostel

Hostel life provides opportunities to students to learn life skills such as independence of decisions, team work, emotional maturity and working with people from diverse culture. To ensure this, the Institute has separate boys' hostels and girls' hostels within the campus. Rooms are spacious, clean, airy and well maintained. They are provided with beds, wardrobes, study tables and chairs. 24 hours water and power back-up facility is available.

Cafeteria

The Institute has a spacious and clean canteen that caters to the taste of all students. It provides students and faculty with nutritious and hygienic food. It is a place where students unwind and relax with friends to enjoy good quality, delicious and healthy food at nominal rates. The college canteen is a place where students congregate to not only eat but exchange views.

Security

The campus has 24 hour security which provides a sense of satisfaction to all. The responsibility of safety of Rajkiya Engineering college, Bijnor is given to UP Home guard, which is a Paramilitary Police Force. There is only one entry and exit from the college which is guarded 24 hours by the home guards. Entry in log book is mandatory for everybody at the time of entry and exit. The home guards are available at six different locations inside the college campus to ensure safety. Total 20 home guards are appointed for the college, worked in 3 shifts of 8 hours. One guard is on the round duty during day/night. There is proper light arrangement at the main gate and within the campus during night.

Medical

The Institute provides first aid and medical facilities to the students. Special facilities are also provided at the time of emergency.

ATM

The Institute is having the 24x7 facility of ATM within the campus.

Guest House

The Institute has a well furnished guest house within the campus.

Student Counselling

A system of student counselling by the faculty to provide due care to students, exist in the Institute. The faculty counsellors provide guidance and advice to the students in matters related to academic, professional and personal issues. The students are advised to utilize this facility for the best of their benefits.

Start-Up Cell

The Start-Up Cell of REC Bijnor has been established with the objective of creating, fostering and promoting the spirit of entrepreneurship among the students. It plays a vital role to provide the practical exposure to the students by providing them hands-on-experience. Such initiatives lead towards market expansion and job creation.

The focus of Cell is to motivate students to work on their innovative ideas and to participate in various competitions. The Cell also focuses on organizing guest lectures, workshops and trainings for the students & is committed to build a strong platform for the budding entrepreneurs. The vision is to guide the students to take entrepreneurship as a career, as a path to success, as a journey of wisdom.

A team of faculty members is dedicated for the smooth functioning of the Start-Up Cell. Faculty members also focus on attending various training programs related to entrepreneurship and Start-Up activities & guide the students to work on their innovative ideas.

6. SOCIAL ACTIVITIES

"Satkarya" Samiti is founded in REC Bijnor with an aim of qualitative changes in the structure and framework of society by providing assistance or help to the needful person.

This Samiti is run by the students of REC Bijnor under the guidance of Dr. Navneet Kumar (EE Dept.). Members of Satkarya Samiti collected items which are not useful to students in each semester and distribute these items to the needy ones.

There are various functions organised by "Satkarya" Samiti like:

- 1. Blanket distribution in nearby areas during winters.
- 2. Competition organised in nearby primary schools to motivate students and the winners of competition were awarded in REC campus.

7. CO-CURRICULAR ACTIVITIES

Literary Club

Literary Club provides a platform to the students to showcase their talent beyond books. Literary events are held regularly and are spread over the entire academic year. Every year a series of events like English Debate, JAM, Hindi Debate, Rangoli Competition, Poster Making Competition, Admad Show, Creative Writing etc. are organised by the literary club of the college.

The events are planned and executed in a manner so as to inculcate confidence, improve expression, to develop creative ability and to reduce stage fear.

Club Structure:

- Faculty Coordinators
- Student Coordinators

Fine Arts and Hobby Club

In fine arts and hobby club various activities are organized every year and students from

• Sketching	• 3-Leg Race	• Treasure Hunt
U	e Log Have	
Face Painting	 Arm-Wrestling 	 Calligraphy
Rangoli	Tatto Designing	Nail Art
• Bull's Eye	Rubic's Cube	Tounge Twister
Paper Dance	Photography	• Bowling
• Paper Throw	• Eye Staring	• Rec Got Talent,
• Mehandi	Skipping	• Dance Battle
• Push-UP	Hair Styling	• Takken
Spoon Race	Card Making	Mini Militia
• Mobile Texting	Gully Cricket	• FIFA
• NFS	Code Debugging	Web Designing
Code Hunt	Technical Quiz	Circuit Designing

different branches participated in these events. Such types of events are common platform for all students to grow their hidden potential and capability.

Sports Club

Sports club has come up with the purpose of providing diverse sports facilities. Outdoor games like volleyball, cricket, football, badminton, kabbadi, tug of war, etc keep students healthy and active. It has become basic for regular physical activity. Sports club also offer many indoor games like chess, carom, T.T. etc. The club organises the Annual Sports, Inter college Sports Meet etc.

Objective

To provide students, faculty and staff the opportunity for instruction and participation in a wide variety of sports of which one may develop sound, lifelong leisure values.

To develop leadership skills by providing opportunities for students to organize, administer, and manage through individual clubs and/or the Club Sports Council.

To provide an outlet for advanced participation and competition in a particular sport.

To provide facilities and equipment necessary to learn and practice skills of a particular sport.

Cultural Club

Purpose

To enhance personal skills by organizing various cultural activities, which gives confidence, impart team work, collaboration, time management and organizational skills in the students, it also gives the ability to think beyond boundary, increases experimental ideas, communication skills and the students learn the art of coping with criticism, which leads to an overall development of the students. Above all, various cultural activities give a relaxation to student from their regular curriculum and give them new freshness for their upcoming studies.

About Us: The annual cultural fest of Rajkiya Engineering College Bijnor, "*SPANDAN*" is the main event organised by cultural club. SPANDAN is a two day extravaganza of art and culture, which is enjoyed by whole REC family and also by the guests who came to encourage the participants.

Club Structure:

- Faculty Coordinators
- Students Secretaries
- Students Voluntary Members

List of Activities:

- Nukkad natak
- Dance competitions
- Singing competitions
- Poetry
- Speech
- Ramp walk etc.

8. FACULTY IN POSITION

Prof. (Dr.) Bipin Kumar Tripathi	Director	7617589582	directorrecbijnor@gmail.com					
CIVIL ENGINEERING DEPARTMENT								
Er. Ankit Singh	Assistant Professor	9358789889 7417038265	ankitsingh4991@gmail.com					
Er. Mohammad Haroon	Assistant Professor	9760252420	civil.haroon@gmail.com					
Er. Rachit Kumar	Assistant Professor	8006961077	tomarkrachit@gmail.com					
Er. Rohit Dhaka	Assistant Professor	9761776122	rohit.dhakas@gmail.com					
Er. Shagun Pandey	Assistant Professor	6395159560	shagun.pandey15@gmail.com					
ELE	CTRICAL ENGINEEI	RING DEPART	TMENT					
Dr. Navneet Kumar	Assistant Professor	9456993646 7906846508	teenvan2002@gmail.com					
Er. Abhishek Chauhan	Assistant Professor	9896020767	abhi027chauhan@gmail.com					
Er. Archana Sharma	Assistant Professor	9817744166 9015556880	archana_9114@yahoo.com					
Er. Jitendra Kumar Vashishtha	Assistant Professor	9897402388	jitendravashishtha23@gmail.com					
Er. Mohmmad Ahmad	Assistant Professor	9358234229 8377894110	ahmadbtech@gmail.com					
Er. Suneel Kumar	Assistant Professor	8218274381 9458547090	suneelkm17@gmail.com					
Er. Vijay Pal Singh	Assistant Professor	7051055309	vijayetah19@gmail.com					

INFORMATION TECHNOLOGY DEPARTMENT

Dr. Ishan Bhardwaj	Assistant Professor	8920343313	dr.ishanbhardwaj@gmail.com
Er. Pushp Maheshwari	Assistant Professor	9027949755	pm.recb@gmail.com

Er. Santosh Kumar	Assistant Professor	9026318525	santosh.recb@gmail.com
Er. Sudhir Goswami	Assistant Professor	9411026152	sudhirgoswami.recb@gmail.com
Er. Vivek Kumar Jaiswal	Assistant Professor	8789640524	vivekjaiswalabes@gmail.com

APPLIED SCIENCE AND HUMANITIES DEPARTMENT

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Dr. Hemaunt kumar	Assistant Professor	9760374434	hvatsal@gmail.com
Mr. Paritosh Sharma	Assistant Professor	7017615990	paritosh31@gmail.com
Dr. Pravesh Kumar	Assistant Professor	8130699109	praveshtomariitr@gmail.com
Dr. Priyanka	Assistant Professor	9454338957	priyanka.rs.apm@itbhu.ac.in
Dr. Subia Ambreen	Assistant Professor	9919074293	ambreensubia@gmail.com

9. IMPORTANT HELP LINE NUMBERS

Director		Prof. (Dr.) Bipin Kumar Tripathi	7617589582	
Registrar		Mr. Naresh Kumar	9760521362 7617589583	
Finance and account officer		(Seat Vacant) (Seat Vacant)		
Dean	8			
	Dean Academic & Planning	Dr. Pravesh Kumar	8130699109	
	Dean Research & Development	Dr. Ishan Bhardwaj	8920343313	
	Dean Student welfare	Dr. Hemaunt Kumar	9760374434	
HoD	(Head of Department)			
	Civil Engineering	Er. Shagun Pandey	6395159560	
	Computer Sciences and Engineering	Er. Santosh Kumar	9026318525	
	Electrical Engineering	Er. Archana Sharma	9817744166 9015556880	
	Information Technology	Dr. Ishan Bhardwaj	8920343313	
	Mechanical Engineering	Mr. Paritosh Sharma	7017615990	
	Applied Science and Humanities	Dr. Priyanka	9454338957	
Proctorial Board				
	Chief Proctor	Dr. Pravesh Kumar	8130699109	
	Assistant Chief Proctor	Dr. Ashu Tomar	8126752214	
	Dean Academic & Planning	Dr. Pravesh Kumar	8130699109	
	Members	All Wardens		

BH-1 (Bhagirathi)	1. Er. Vijay Pal Singh	7051055309
	2. Er. Mohammad Ahmad	9358234229 8377894110
BH-2 (Mandakini)	1. Er. Santosh Kumar	9026318525
	2. Er. Rachit Kumar	8006961077
BH-3 (Alaknanda)	1. Er.Jitendra kumar Vashistha	9897402388
	2. Er. Vivek Kumar Jaiswal	8789640524
BH-4 ()	1. Er. Abhishek Chauhan	9896020767
	2. Er. Suneel Kumar	8218274381 9458547090
GH-3 (Yamuna)	1. Dr. Subia Ambreen	9919074293
	2. Er. Archana Sharma	9817744166 9015556880
B.Tech Examination		
Controller of Examination	Er. Ankit Singh	9358789889
		7417038265
Deputy Controller of Examination	Er. Pushp Maheshwari	9027949755
Deputy Controller of Examination Assistant Controller of Examination	Er. Pushp Maheshwari Er. Rachit Kumar	
	-	9027949755
Assistant Controller of Examination	Er. Rachit Kumar	9027949755 8006961077
Assistant Controller of Examination Chairman (Anti Ragging)	Er. Rachit Kumar Er. Rohit Dhaka	9027949755 8006961077 9761776122
Assistant Controller of Examination Chairman (Anti Ragging) Chairman (Grievance Cell)	Er. Rachit Kumar Er. Rohit Dhaka Dr. Hemaunt Kumar	9027949755 8006961077 9761776122 9760374434 8376976277
Assistant Controller of Examination Chairman (Anti Ragging) Chairman (Grievance Cell) Chairman (Nirmaan Samiti)	Er. Rachit Kumar Er. Rohit Dhaka Dr. Hemaunt Kumar Er. Shagun Pandey	9027949755 8006961077 9761776122 9760374434 8376976277 6395159560
Assistant Controller of Examination Chairman (Anti Ragging) Chairman (Grievance Cell) Chairman (Nirmaan Samiti) Chairman (Maintenance)	Er. Rachit Kumar Er. Rohit Dhaka Dr. Hemaunt Kumar Er. Shagun Pandey Er. Mohammad Haroon	9027949755 8006961077 9761776122 9760374434 8376976277 6395159560 9760252420
Assistant Controller of Examination Chairman (Anti Ragging) Chairman (Grievance Cell) Chairman (Nirmaan Samiti) Chairman (Maintenance) Chairman (SC/ST Cell) Chairman (Women Cell)	Er. Rachit Kumar Er. Rohit Dhaka Dr. Hemaunt Kumar Er. Shagun Pandey Er. Mohammad Haroon Er. Santosh Kumar Dr. Subia Ambreen	9027949755 8006961077 9761776122 9760374434 8376976277 6395159560 9760252420 9026318525 9919074293

Coordinator (Start-Up)	Er. Suneel Kumar	8218274381 9458547090
Coordinator (Student Counselling Cell AKTU)	Er. Mohammad Haroon	9760252420
Coordinator (TEQIP Academic)	Er. Suneel Kumar	8218274381 9458547090
Coordinator (TEQIP III)	Dr. Ishan Bhardwaj	8920343313
Nodal Officer (Fee Reimbursement and Scholarship)	Er. Santosh Kumar	9026318525
Nodal Officer (Students Under PMSSS)	Er. Sudhir Goswami	9411026152
Nodal Officer (TEQIP Finance-Second)	Er. Sudhir Goswami	9411026152
Officer I/C Cultural (Female)	Er. Archana Sharma	9817744166 9015556880
Officer I/C Cultural (Male)	Er. Pushp Maheshwari	9027949755
Officer I/C Fine arts and Hobby Club	Dr. Hemaunt kumar	9760374434
	Dr. Priyanka	9454338957
Officer I/C Guest House	Er. Vivek Kumar Jaiswal	8789640524
Officer I/C Horticulture & Campus Up-Keeping	Er. Suneel Kumar	8218274381 9458547090
Officer I/C Internet and Website	Er. Santosh Kumar	9026318525
Officer I/C Library	Er. Pushp Maheshwari	9027949755
Officer I/C Literary club	Dr. Ashu Tomar	8126752214
	Er. Shagun Pandey	6395159560
Officer I/C Media	Er. Pushp Maheshwari	9027949755
Officer I/C Public Information (RTI)	Er. Mohmmad Ahmad	9358234229 8377894110
Officer I/C Purchase	Mr. Paritosh Shamra	7017615990
Officer I/C Security	Dr. Navneet Kumar	7906846508 9456993646
Officer I/C Sports	Er. Mohammad Haroon	9760252420
------------------------------------	----------------------	--------------------------
	Er. Rohit Dhaka	9761776122
Officer I/C Store & Purchase	Er. Rohit Dhaka	9761776122
Officer I/C Telephone	Er. Abhishek Chauhan	9896020767
Officer I/C Time table & Classroom	Er. Mohmmad Ahmad	9358234229 8377894110
Officer I/C Vehicle	Mr. Paritosh Sharma	7017615990

10. Highlights of the Institutes:

राजकीय इंजीनियरिंग कॉलेज बिजनौर शीर्ष पर

लखनऊ कार्यालय संवाददाता

डॉ. एपीजे अब्दुल कलाम प्राविधिक विश्वविद्यालय (एकेटीयू) ने संबद्ध संस्थानों की रैकिंग तैयार की है। रैकिंग में राजकीय इंजीनियरिंग कॉलेज बिजनौर शीर्ष पर है। वहीं शीर्ष पांच में लखनऊ का सिर्फ संस्थान जगह बना पाया है। जिसमें श्रीराम स्वरूप मेमोरियल कॉलेज ऑफ इंजीनियरिंग एंड मैनेजमेंट चौथे पायदान पर है। विवि प्रशासन जल्द ही रैंकिंग जारी करेगा।

एकेटीयू परीक्षा नियंत्रक प्रो. राजीव कुमार ने बताया कि रैंकिंग में दूसरे नंबर पर गाजियाबाद का कृष्णा इंजीनियरिंग कॉलेज है। जबकि कानपुर के प्रणवीर सिंह इंस्टीट्यूट ऑफ टेक्नोलॉजी (पीएसआईटी) को तीसरा स्थान मिला है। इसके अलावा अजय कुमार गर्ग इंजीनियरिंग कॉलेज गाजियाबाद को

एकेटीयू रैंकिंग

 रैकिंग में 134 संस्थानों को किया गया शामिल, अधिकतर बदहाल

 गाजियाबाद का कृष्णा इंज. दूसरे पीएसआईटी कानपुर तीसरे पर

र्रेकिंग तैयार कर ली गई है। जल्द ही इसे जारी कर दिया जाएगा। रैंकिंग जारी करने का मकसद है कि जो संस्थान अव्वल हैं, उनको पहचान मिल सके और जो पीछे हैं, वह गुणवत्तापरक पढ़ाई करवाकर प्रतिस्पर्धी में शामिल। इससे छात्रों को लाभ मिलेगा। – प्रो. विनय पाठक, कुलपति, एकेटीयू

पांचर्वी रैंक हासिल हुई है। गलगोटिया जैसे संस्थान हमेशा से शीर्ष पर रहे हैं लेकिन इस बार की रैंकिंग में उसमें गिरावट आई है। **>देखें** पेज 13



DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW



Rules and Regulations

For

Undergraduate Course

(B. Tech. /B. Pharmacy/BHMCT/BFAD)

On

Choice Based Credit System

(Effective from the Session: 2016-17)

Dr. A.P.J. Abdul Kalam Technical University Lucknow

CHOICE BASED CREDIT SYSTEM (CBCS) ORDINANCE GOVERNING THE DEGREE OF BACHELOR OF ENGINEERING / TECHNOLOGY /PHARMACY/HOTEL MANAGEMENT AND CATERING TECHNOLOGY/FASHION AND DESIGN/(B.E./B.Tech./B.Pharm./B. HMCT/BFAD)

CHOICE BASED CREDIT SYSTEM (CBCS):

The choice based credit system provides flexibility in designing curriculum and assigning credits based on the course content and hour of teaching. The choice based credit system provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective and open elective courses .The CBCS provides a cafeteria type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquired more than the required credits, and adopt an interdisciplinary approach to learning. The courses shall be evaluated on the grading system, which is considered to be better than the conventional marks system. It is necessary to introduce the grading system to make the uniformity among all technical institutions of India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on studentø performance in examinations, the AICTE has formulated the guidelines to be followed.

DEFINITIONS OF KEY WORDS:

- (*i*) University: Dr. APJ Abdul Kalam Technological University, Lucknow (APJAKTU).
- *(ii)* Academic Year: Two consecutive (one odd + one even) semesters constitute one academic year.
- *(iii)* Semester: Each semester will consist of 15-18 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from July to December and even semester from January to June.
- *(iv)* Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses *(core, elective and Foundation Courses).*
- (v) Credit Based Semester System (CBSS): Under the CBSS, the requirement for awarding a degree or certificate is prescribed in terms of number of credits to be earned by the students.
- (vi) **Programme:** An educational programme leading to award of a Degree.
- (vii) Course: Usually referred to, as -papersø is a component of a programme. All courses need not carry the same weightage. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.
- (viii) Branch: Specialization or discipline of B.E./B.Tech. Degree Programme, like Civil Engineering, Agriculture Engineering, etc.

- *(ix)* Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters A, B, C, D, E and F.
- (x) Grade Point: It is a numerical weightage allotted to each letter grade on a 10-point scale.
- (xi) Credit: A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.
- (xii) Credit Point: It is the product of grade point and number of credits for a course.
- (xiii) Semester Grade Point Average (SGPA): It is a measure of academic performance of student/s in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
- (xiv) Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points earned by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.
- (xv) First Attempt: If a student has completed all formalities and become eligible to attend the examinations and has attended at least one subject of passing, such attempt (first sitting) shall be considered as first attempt.
- (xvi) Transcript or Grade Card or Certificate: Based on the grades earned, a grade sheet/certificate shall be issued to all the registered students at the end of every academic year. The grade sheet/certificate will display the course details (code, title, number of credits, grade secured) along with SGPA of both semesters and CGPA earned till that academic year.

The CBCS provides choice for students to select from the prescribed courses. Sequencing Plan for the B.Tech. Degree Curriculum

Semesters	Course Coverage
I óII	Applied Science Courses and Common Engineering Courses for
	all Branches; Mandatory Courses
III-IV	Applied Sciences Courses (Common for all Branches) and Engineering
	Core Courses: Core/Elective
V-VI	Humanities and Mandatory Courses, Engineering Core & Electives
	Courses; Other Electives; Branch-wise Orientation
VII-VIII	Engineering Core & Electives Courses; Open Electives; Branch-wise
	Orientation Electives/Elective; Other Electives, Internship, Project work

Credit Structure for Course Work

Lectures (hrs/wk/Sem)	Tutorial(hrs/wk/ Sem)	Lab.Work (hrs/wk/Sem)	Credits
3	1	0	4
2	1	0	3
0	1	0	1
0	0	2	1
0	0	3	2
0	1	3	3
0	1	2	2

1. ADMISSION

- **1.1** Admission to B.Tech./B.Pharm./B. HMCT/BFAD first year in Ist semester and lateral admission in B.Tech. /B.Pharm. second year in IIIrd semester (for diploma holder/B.Sc. candidates only) will be made as per the rules prescribed by the Academic Council of the Dr. A.P.J.Abdul Kalam Technical University (APJAKTU) Lucknow.
- **1.2** Admission on migration of a candidate from any other University to the University is not permitted.

2. ELIGIBILITY FOR ADMISSIONS

2.1 Admission to B. Tech. /B. Pharm./B.HMCT/BFAD First Year through Entrance Examination:

(a) Eligibility for admission to under graduate courses in First year shall be as per guidelines of All India Council for Technical Education (AICTE) / Related Council and according to the latest U.P. Government notifications/rules.

2.2 Admission to B.Tech. Second Year through Lateral Entry Scheme:

- (a) Candidates who have passed 3/4 year Diploma (with minimum 60% marks) from institutions recognized by the U.P. Board of Technical Education in any branch of Engineering/Technology except Agriculture Engineering are eligible for admission to Second year in any branch of Engineering./Technology except Agriculture Engineering
- (b) Candidates who have passed 3/4 year Diploma (with minimum 60% marks) from institutions recognized by the U.P. Board of Technical Education in Agriculture Engineering are only eligible for admission to Second year of Agriculture Engineering.
- **2.3 Direct admission on vacant seats at institution/college level:** The eligibility criteria for direct admission on seats remaining vacant in first year after entrance examination counseling shall be such as may be notified from time to time.
- **2.4** The Academic Council shall have power to amend or repeal the eligibility criteria laid down at clause 2.1. & 2.2, as per the guidelines of AICTE.

3. ATTENDANCE

- **3.1** Every student is required to attend all the lectures, tutorials, practicals and other prescribed curricular and co-curricular activities. The attendance can be condoned up to 25% on medical grounds or for other genuine reasons beyond the control of students.
- **3.2** A further relaxation of attendance up to 15% for a student can be given by Head of Institution/college provided that he/she has been absent with prior permission of the Head of the institution/college for the reasons acceptable to him.

- **3.3** No student will be allowed to appear in the end semester examination if he / she do not satisfy the overall average attendance requirements of Clause Nos. 3.1, and 3.2. and such candidate(s) shall be treated as having failed and will be further governed by clause no. 4.2 & 4.3.
- **3.4** The attendance shall be counted from the date of admission in the college or start of academic session whichever is later.

4. DURATION OF COURSES

- **4.1** Total duration of the B.Tech./B. Pharm./B.HMCT/BFAD Course shall be 4 years, each year comprising of two semesters. Each semester shall normally have teaching for the 90 working days or as prescribed by A.I.C.T.E. from time to time.
- **4.2** The student admitted to 1st year B.Tech./B. Pharm./B.HMCT/BFAD shall complete the course within a period of seven academic years from the date of first admission, failing which he/she has to discontinue the course. The students admitted under lateral entry scheme (2nd Year B.Tech./B. Pharm.) shall complete the course within a period of six academic years from the date of first admission, failing which he/she has to discontinue the course.
- **4.3** A candidate, who has failed twice in first year due to any reason (either due to his/her non-appearance or he/she being not permitted to appear in semester examinations) shall not be allowed to continue his/her studies further. Provided further that if a student wishes to continue third time in first year he/she may be allowed on the terms and conditions laid down by the University for such permission but the maximum time allowed for completing the course will remain the same as in clause 4.2.
- **4.4** The minimum credit requirement for B.Tech./B. Pharm./B.HMCT/BFAD degree is 192 credits. The lower and upper limit for course credits registered in a semester by a full time student of a degree program are:

Lower limit - 16 Credits Upper limit - 28 Credits

5. CURRICULUM

- **5.1** The 4 year curriculum has been divided into 8 semesters and shall include lectures, tutorials, practicals, seminars and projects etc. in addition to industrial training and educational tour etc. as defined in the scheme and executive instructions issued by the University from time to time.
- **5.2** The curriculum will also include such other curricular, co-curricular and extracurricular activities as may be prescribed by the University from time to time.
- 5.3 The subjects listed in semester I or II for B. Tech (other than Agriculture) will be in floating mode except the mathematics-I & II and Physics-I & II(for Biotech except Elementary Maths-I &II/ Remedial Biology-I& II and Physics-I & II). Institutes will be free to make their own pool of subjects with total no of credits not exceeding 28 per semester.

6. CHANGE OF BRANCH

- **6.1** Change of branch may be allowed against the vacant seats in the following two stages, provided criteria at following sub clauses is satisfied:
 - (a) In first year, after the last date of admission to the B.Tech. Ist semester, on the basis of merit of entrance examination on vacant seat subject to clause 6.2.
 - (b) In the second year, on the basis of merit at the B.Tech. first year examination for those who are pass without any carry over paper subject to clause 6.2.
- **6.2** After change of branch, number of students in branch(s) shall neither increase over the intake approved by A.I.C.T.E. nor it will decrease below 75% of intake approved by A.I.C.T.E.
- 6.3 Change of branch facility is not applicable to following:-
 - (a) Candidates admitted in B.Tech. Agricultural Engineering/Biotechnology courses.
 - (b) Candidates admitted in second year of B.Tech. courses as per clauses 2.2
- 6.4 The change of branch if allowed will become effective from B.Tech. IIIrd semester.
- **6.5** The Branch change process must be completed by 30th August of each academic session. Further change of branch shall not be permitted.

7. CHANGE OF COLLEGE

- 7.1 Change of College shall not be permitted.
- 7.2 Change of study center shall not be permitted.

8. EXAMINATION

- **8.1** The performance of a student in a semester shall be evaluated through continuous class assessment and end semester examination. The continuous assessment shall be based on class tests, assignments/tutorials, quizzes/viva-voce and attendance. The marks for continuous assessment (Sessional marks) shall be awarded at the end of the semester. The end semester examination shall be comprised of written papers, practicals and viva-voce, inspection of certified course work in classes and laboratories, project work, design reports or by means of any combination of these methods.
- **8.2** The distribution of marks for sessional, end semester theory papers, practicals and other examinations, seminar, project and industrial training shall be as prescribed. The practicals, viva-voce, projects and reports shall be examined/evaluated through internal and external examiners as and when required.
- **8.3** The marks obtained in a subject shall consist of marks allotted in end semester theory paper and sessional work.

9. ELIGIBILITY OF PASSING

- **9.1** A student who obtained Grades A⁺ to E shall be considered as passed. If a student secured õFö grade, he /she has to reappear for the examination. It is mandatory for a student to earn the required credits as mentioned in each semester.
 - (a) For a pass in a Theory Subject/Drawing, a student shall secure minimum of 30% of the maximum marks prescribed in the University Examination and 40% of marks in the aggregate marks in the subject including sessional marks. i.e. Minimum Passing Grade is õEö.
 - (b) For a pass in a Practical/Internship/Project/Viva-voce examination, a student shall secure a minimum of 50% of the maximum marks prescribed for the University Examination in the relevant Practical/Internship/Project/Viva-voce and 40% of marks in the aggregate marks in the Practical/Internship/Project/Viva-voce including sessional marks . i.e. Minimum Passing Grade in a course is õEö.
 - (c) For a pass in Seminar, a student shall secure a minimum of 40% of the maximum marks prescribed. i.e. Minimum Passing Grade is õEö.
- **9.2** The students who do not satisfy the condition 9.1 or the student who remains absent shall be deemed to have failed in that subject and may reappear for the University examination in the subsequent examinations. However, the Sessional marks awarded to the student/s at previous attempt in the concerned subject will be carried forward.
- **9.3** A student may, at his/her desire, opt to abandon his/her performance of a semester in following manner.
 - (a) A student may opt to abandon his/her performance only in University Examination of the Semester.
 - (b) A student may opt to abandon his/her Total Performance of the Semester which includes performance in University Examination and Sessional Marks.
 - (c) A student may opt to abandon his/her performance in University Examination of any or both semesters of the same academic year only.
 - (d) A student shall be allowed to abandon the performance maximum twice during the entire course of study.
 - (e) Performance of a semester, once abandoned, can not be claimed again.
- **9.4** The student, who opts to abandon the performance of a semester as per clause 9.3, shall abandon performance in all the courses of that semester, irrespective of the fact whether the student has passed or failed in any subject of that semester.
- **9.5** A student, who opts to abandon the total performance of the semester including sessional marks, has to take readmission for the relevant semester. Readmission to the First semester in such cases shall not be considered as fresh admission i.e., the student will continue to have the same University Roll Number, which was allotted earlier.
- **9.6** The student, who opted to abandon his / her performance only in the University examination of a semester and does not desire readmission, shall be permitted to re-appear for examinations of all the subjects of the semester in the subsequent examinations as an Ex-

Student. However, the sessional marks obtained by the student in the abandoned semester shall be retained.

- **9.7** Such students who opted to abandon the performance at final year are eligible for the award of Class and Distinction at the B.Tech./B. Pharm./B.HMCT degree level, but are not eligible for the award of ranks.
- **9.8** The student who passes a course of a semester as per 9.1 shall not be allowed to appear for the same again, unless he/she opts for *abandoning of results* as per 9.3-9.7.
- **9.9** A student shall be declared to have completed the program of B.Tech./B. Pharm./B.HMCT degree, provided the student has undergone the stipulated course work as per the regulations and has earned at least **192** Credits.

10. ELIGIBILITY FOR PROMOTION

- **10.1** There shall not be any restriction for promotion from an odd semester to the next even semester.
- **10.2** For promotion from even semester to the next odd semester (i.e. of the next academic year) the student has secured 24 credits in the immediately preceding two semesters including theory and practical credits.

Minimum Credit Threshold for Promotion

Check Point

Credit Threshold

First Year to Second Year	24 Credits in First Year
Second Year to Third Year	24 Credits in Second year
Third Year to Fourth Year	24 Credits in Third year

- **10.3** The result of the semester shall be declared pass only on securing E or above grades in all subjects and minimum Semester Grade Point Average (SGPA) is 5.0.
- **10.4** Student himself can decide to abandon the performance of any or both the semesters of same academic year as per clause 9.3 and reappear in abandoned semester examination as per clauses 9.4, 9.5 & 9.6.

11. CARRYOVER SYSTEM

11.1 Following rules shall be followed for carry over papers:

(a) A candidate who satisfies the requirements of clause 9.2 (a) will be required to appear in those theory papers / practicals during respective end semester exams in which he/she failed.

(b) A candidate satisfying clause 9.2 (b) shall be required to exercise his/her choice of theory papers in which he/she desires to appear in the examination to fulfill the requirements of clause 9.1(a).

(c) A candidate shall be required to exercise his/her choice of minimum theory papers in which he/she desires to appear in the examination for improvement to fulfill the requirements of clause 10.3.

(d) Candidate appearing for carry over paper in any semester shall be examined with the examination paper of that subject running in that semester.

11.2 All carryover examinations shall be held only with end semester examination.

12. RE-ADMISSION IN THE INSTITUTION/ COLLEGE

A candidate may be allowed for re-admission provided he/she satisfies one of the following conditions:

- (a) A candidate is declared fail.
- (b) A candidate did not appear in a semester examination / or he/she was not granted permission to appear in the examination.
- (c) A candidate has been detained by the institute and subsequently has been permitted to take re-admission.
- (d) A candidate has own desire to abandon the performance of semester(s).

13. COURSES

13.1There will be four types of courses.

(i) Foundation Courses: The Foundation Courses are of two kinds: Compulsory Foundation and Elective foundation.

õCompulsory Foundationö: These courses are the courses based upon the content that leads to Knowledge enhancement. They are mandatory for all disciplines.

õFoundation Electivesö: These are value based courses aimed at man making education.

- (ii) **Core Courses**: This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirements of a program in a said discipline of study.
- (iii) Elective Courses: This is course, which can be chosen from the pool of papers. It may be supportive to the discipline/ providing extended scope/enabling an exposure to some other discipline / domain / nurturing student proficiency skills.
- (iv) Mandatory Courses: These courses are mandatory for students joining B.Tech. Program and students have to successfully complete these courses before the completion of degree.

13.2 The minimum number of students to be registered for an Elective to be offered shall be not less than twenty.

13.3 A student shall exercise his option in respect of the electives and register for the same at the beginning of the concerned semester. The student may be permitted to opt for change of elective subject within 15 days from the date of commencement of the semester as per the calendar of the University.

4. COMPUTATION OF SGPA AND CGPA

14.1 The Dr. A.P.J.Abdul Kalam Technical University (APJAKTU) Lucknow adopts absolute grading system wherein the marks are converted to grades, and every semester results will be declared with semester grade point average (SGPA) and Cumulative Grade Point Average (CGPA). The CGPA will be calculated every semester, except the first semester. The grading system is with the following letter grades and grade points scale as given below:

Level	Outstandi ng	Excellent	Very Good	Good	Above Average	Average	Poor	Fail
Letter Grade	\mathbf{A}^{+}	Α	B ⁺	В	C	D	Е	F
Grade Points	10	9	8	7	6	5	4	00
Score (Marks) Range	≥ 90	<90	<80, ≥70	<70, ≥60	<60 ,≥50	<50, ≥45	<45, ≥40	< 40
(%)	(90-100)	(80-89)	(70-79)	(60-69)	(50-59)	(45-49)	(40-44)	(0-39)

14.2 A student obtaining Grade õFö shall be considered failed and will be required to reappear in the examination. Such students after passing the failed subject in subsequent examination/s will be awarded with õEö grade irrespective of marks he/she scores in the subsequent examination/s. Number of attempts taken to clear a subject/s shall be shown in the transcripts.

14.3 The University has right to scale/moderate the theory exam/practical exam/sessional marks of any subject whenever required for converting of marks in to letter grades on the basis of the result statistics of university as in usual practice.

- (a) The modality for moderation of marks before the declaration of result shall be decided by a committee of Pro-Vice Chancellor, Dean UG, Assoc. Dean UG and Controller of Examination.
- (b) The modality for moderation of marks if needed after the declaration of result shall be decided by a committee of Pro-Vice Chancellor, Dean UG, Assoc. Dean UG, Controller of Examination and an external member not below the rank of Professor nominated by the Vice Chancellor.
- (c) If the candidate(s) appeared in the examination but theory marks are not available due to missing of copy by any reason, the average marks may be awarded as decided by the

committee mentioned in 14.3(a). In case of missing/unavailable of sessional marks, Controller of Examination can take decision as per the provision laid down by the Examination Committee.

- (d) The Committee defined in14.3 (a) shall also fix up the responsibility and recommend the punishment for occurrence of such case(s) in14.3(c).
- (e) All the matters defined under 14.3(a) to 14.3 (d) shall be executed subject to the approval of Academic Council of the APJAKTU.

14.4 Computation of SGPA and CGPA

The following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

(a) The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

SGPA (Si) = $(Ci \times Gi) / Ci$

where C_i is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

(b) The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

 $CGPA = (Ci \times Si) / Ci$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

(c) The SGPA and CGPA shall be rounded off to 2 decimal places and reported in the transcripts.

Illustration for Computation of SGPA and CGPA

Course	Credit	Grade letter	Grade point	Credit Point
				(Credit x Grade)
Course 1	4	\mathbf{B}^+	8	4x8 = 32
Course 2	4	С	6	4x6 = 24
Course 3	4	В	7	4x7 = 28
Course 4	3	\mathbf{A}^{+}	10	3x10= 30
Course 5	3	D	4	3x4 = 12
Course 6	2	С	6	2x6 = 12
Course 7	2	Α	9	2x9 = 18
Course 8	2	С	6	2x6 = 12

Computation of SGPAIllustration No.1

Thus, SGPA= 168/24=7.00

Illustration No.2

Course	Credit	Grade letter	Grade point	Credit Point
				(Credit x Grade)
Course 1	4	\mathbf{B}^+	8	4x8 = 32
Course 2	4	С	6	4x6 = 24
Course 3	4	В	7	4x7 = 28
Course 4	3	\mathbf{A}^{+}	10	3x10= 30
Course 5	3	F	0	3x0 = 00
Course 6	2	С	6	2x6 = 12
Course 7	2	Α	9	2x9 = 18
Course 8	2	С	6	2x6 = 12
Total	24			156

Thus, SGPA= 156/24=6.50

Illustration No.2 (a)

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 5	3	Е	4	3x4 = 12
Ci (First Attempt)156+ Ci (subsequent attempt)12= 168				

Thus, SGPA= 168/24=7.00

Illustration No.3

Course	Credit	Grade letter	Grade point	Credit Point
				(Credit x Grade)
Course 1	4	\mathbf{B}^+	8	4x8 = 32
Course 2	4	С	6	4x6 = 24
Course 3	4	В	7	4x7 = 28
Course 4	3	\mathbf{A}^{+}	10	3x10= 30
Course 5	3	Α	9	3x9= 27
Course 6	2	С	6	2x6 = 12
Course 7	2	Α	9	2x9 = 18
Course 8	2	С	6	2x6 = 12
Total	24			183

Thus, SGPA= 183/24=7.63

CGPA= 24x7.00+24x7.63/48=**7.3125**

CGPA after Final Semester

Sem 1	Sem 2	Sem 3	Sem. – 4	Sem 5	Sem 6	Sem 7	Sem 8	
Credit: 24	Credit : 24	Credit : 27	Credit : 27	Credit :24	Credit : 24	Credit : 24	Credit : 26	
SGPA:7	SGPA:8.5	SGPA:9.2	SGPA:6.86	SGPA:8.18	SGPA:7.73	SGPA:8.68	SGPA:9.4	

Thus, **CGPA=** 24*x*7 + 24*x*8.5 + 27*x*9.2 + 27*x*6.86 + 24*x*8.18 + 24*x*7.73 + 24*x*8.68 + 26*x*9.4/200 **=8.2**

14.5 Transcript (Format): Based on the above recommendations on Letter grades, grade points, SGPA and CCPA, the transcript for each semester and a consolidated transcript indicating the performance in all semesters may be issued.

15. CONVERSION OF GRADES INTO PERCENTAGE

Conversion formula for the conversion of CGPA into Percentage is CGPA Earned x = 10 = Percentage of marks scored.

Illustration: CGPA Earned 8.2 x 10 = 82.0%

16. AWARD OF DIVISION, RANK AND MEDALS

16.1 Division shall be awarded only after the eighth and final semester examination based on integrated performance of the candidate for all the eight semesters (six semester for lateral entry) as per following details.

(a) A candidate who qualifies for the award of the degree securing E or above grades in all subjects pertaining to all semesters in his/her first attempt within eight consecutive semesters (four academic years)/ six consecutive semesters (three academic years) as applicable, and in addition secures a CGPA of 7.5 and above for the semesters I to VIII (III to VIII) shall be declared to have passed the examination in FIRST DIVISION WITH HONOURS.

(b) A candidate who qualifies for the award of the degree by securing E or above grades in all subjects of all the semesters within a maximum period of eight semesters/six semesters as applicable, after his/her commencement of study in the $1st/3^{rd}$ semester an addition secures CGPA not less than 6.5 shall be declared to have passed the examination in FIRST DIVISION.

(c)All other candidates who qualify for the award of degree by securing E or above grades in all subjects of all semesters within a maximum period of eight semesters/six semesters as applicable, after his/her commencement of study in the 1st/3rdsemester an

addition secures CGPA not less than 5.0 shall be declared to have passed the examination in SECOND DIVISION.

16.2 For award of ranks in a branch, a minimum of 10 students should have appeared in the 8th semester examination. The total number of ranks awarded shall be 10% of total number of students appeared in 8th semester or 10 students, whichever is less in that branch.

Illustration:

1. If 1028 students appeared for the 8th semester in Electronics and Communication Engineering Branch, the number of ranks to be awarded for Electronics and Communication Engineering will 10.

2. If 90 students appeared for the 8th semester in Biomedical Engineering Branch, the number of ranks to be awarded for Biomedical Engineering will be 09.

For award of rank in a branch of Engineering / Technology, the CGPA secured by the student from

- (a) 1st to 8th semester for the students admitted to B.E./B.Tech. Program from 1st year, and
- (b) 3rd to 8th semester for the students admitted to B.E./B.Tech. Program from 2nd year (Lateral Entry)

shall be considered.

A student shall be eligible for a rank at the time of award of degree in each branch of Engineering / Technology, provided the student

- (a) Has passed 1st to 8th (students joining from 1st semester) or 3rd to 8th (in case of lateral entry) semester in all the subjects in first attempt only
- (b) Has not repeated/rejected any of the lower semesters.

If two students get the same *CGPA*, the tie should be resolved by considering the number of times a student has obtained higher *SGPA*; but, if it is not resolved even at this stage, the number of times a student has obtained higher grades like A^+ , A, B^+ , B etc shall be taken into account in rank ordering of the students in a program.

16.3 The Gold, Silver and any other Medals as decided by the university shall be awarded to students falls in the top ranks of various courses as per university rules.

17. SCRUTINY AND REVALUATION

17.1 Scrutiny shall be allowed in only theory papers.

17.2 Revaluation of theory/practical papers is permitted only with certain conditions as laid down by university.

18. UNFAIR MEANS

Cases of unfair means shall be dealt as per the rules and regulations of the University.

19. AWARD OF SESSIONAL MARKS

Sessional marks for theory subjects, practicals and project shall be awarded as prescribed and at present the break-up of sessional marks shall be as follows:

(a) Theory Subjects :

(i) Class test which will comprise 20 % of total theory marks with two mid-term tests of equal weightage.

(ii) Teacher Assessment Tutorial/Assignment/ Quizzes/ Attendance comprises 10% of total theory marks.

(b) Practicals,

(i) Two mid-term viva-voce/tests of equal weightage 30% of total Practical marks.

(ii) Teacher Assessment: Lab, Record/ Attendance 20% of total Practical marks.

(c) Make-up test may be held only for those students who could not appear in any one of mid-term class tests due to genuine reasons for which the prior permission from the Head of Institution/College was taken. Make up test shall ordinarily be held about two weeks before the semester examination. The syllabus for the make-up test shall be the whole syllabus covered by the subject teacher upto that time.

20. AWARD OF SEMINAR INDUSTRIAL TRAINING, EDUCATIONAL TOUR MARKS AT INSTITUTION/COLLEGE LEVEL

20.1 The marks of Seminar, Industrial Training, Educational tour marks shall be awarded on the following basis:

(i) Write-up / Report 50%

(ii) Presentation 50%

20.2 The marks in Seminar, Industrial Training and Educational Tour shall be awarded by a committee consisting of following members:

(i) Head of the Department or his/her nominee.

(ii) Concerned Officer ó Incharge.

(iii) Senior Faculty Member of the department nominated by the Head of Department.

21. CANCELLATION OF ADMISSION

The admission of a student at any stage of study shall be cancelled if :

(a) He / She is not found qualified as per AICTE / State Government norms and guidelines or the eligibility criteria prescribed by the University. or

(b) He / She is found unable to complete the course within the stipulated time as prescribed in clause 4.2 or

(c) He / She is found involved in creating indiscipline in the Institution / College or in the University.

22. The Academic Council shall have the power to relax any provision provided in the ordinance in any specific matter/situation subject to the approval of Executive Council of the University.

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