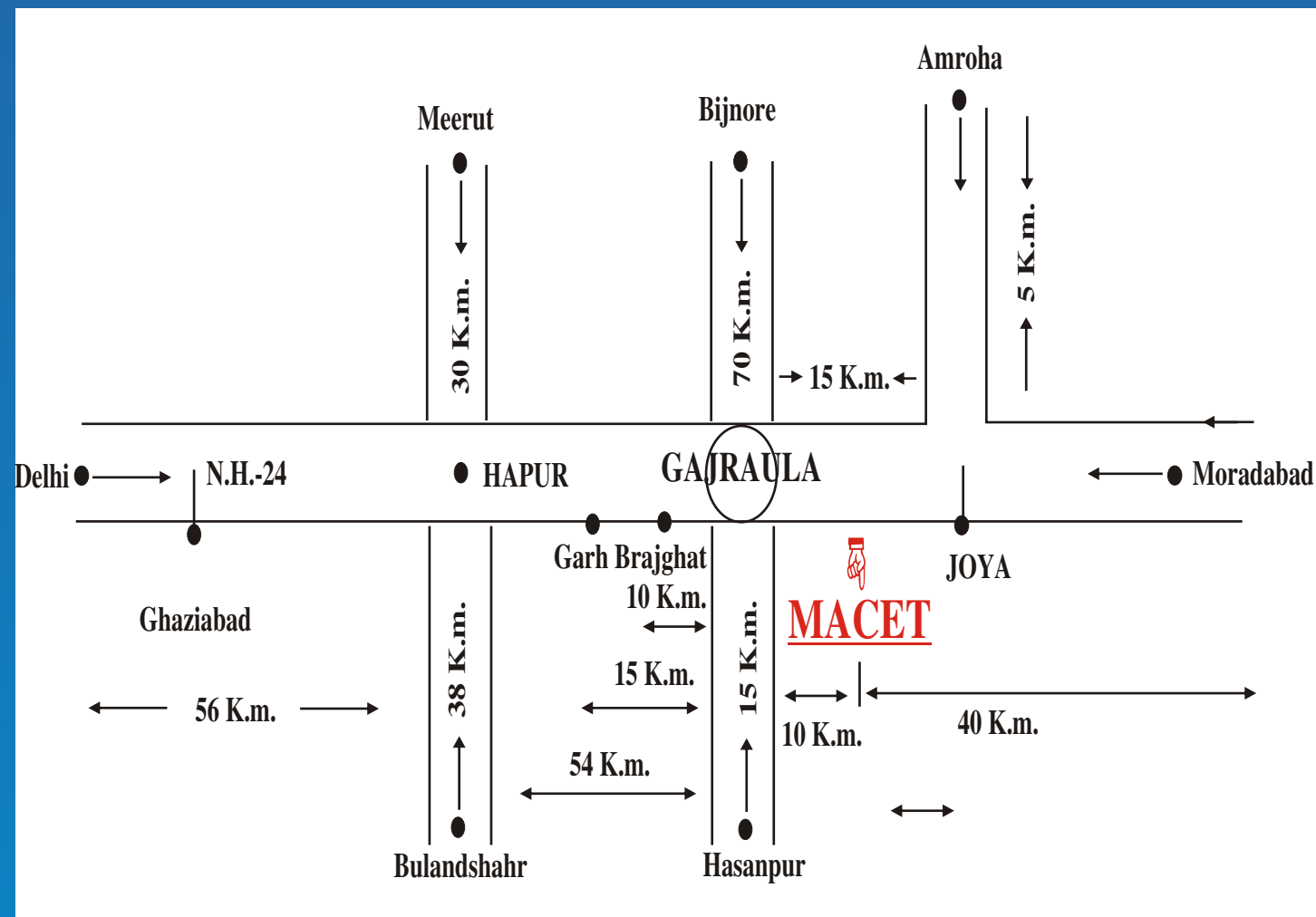


WAY TO
MAHARAJA AGRASEN COLLEGE OF ENGINEERING
AND TECHNOLOGY, GAJRAULA



MAHARAJA AGRASEN COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved By AICTE, New Delhi And Affiliated To UPTU, Lucknow)

ISO:9001-2008 CERTIFIED INSTITUTION

PROSPECTUS

(SESSION: 2014-2015)

100%
PLACEMENT
GUARENTEED



MAHARAJA AGRASEN COLLEGE OF ENGINEERING AND TECHNOLOGY

COLLEGE CAMPUS:-10th Km.Bagarpur Mafee, Gajraula Moradabad Highway N.H-24,
Distt- J.P. Nagar-244236 (U.P.) Mobile No. +91-9639001780/81/82/83/84/85
E-mail- info@agrasencollege.ac.in, Website : www.agrasencollege.ac.in

B.TECH.
(COLLEGE CODE-493)
(CS/IT/EC/EN/ME/CE)

POLYTECHNIC
(COLLEGE CODE-562)
(ME/EE/CE)

MARCHING TOWARDS A GLORIOUS FUTURE

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About Us

Maharaja Agrasen College of Engineering & Technology was established in 2009. The Institute is affiliated to Uttar Pradesh Technical University, Lucknow and approved by A.I.C.T.E, Ministry of HRD, Govt of India.

The institute is located on the NH-24, Delhi road at a distance of only 11 Kms from Gajraula. Thus, being away from the crowd of the city the institute is situated in a spacious lush green site conducive for academic persuasion. The institute offers the courses:

B.TECH. (CS/IT/EC/EN/ME/CE) & POLYTECHNIC(EE/ME/CE)

"Technology is our excellence and quality is our motto"

is the driving force motivating us to work with total commitment towards excellence in every endeavor. It seeks to develop, in each member of our organization, the ability and passion to work wisely, creatively and effectively for the betterment of mankind. We have a commitment to impart futuristic technical & professional education, instill higher ethical, moral values and making the students technologically superior and strong.

The institute has highly qualified and experienced faculty members who help to bridge our founder's vision and the young students zeal to achieve the desired goal. The Institution is attempting to create benchmarks by incorporating new initiatives in the field of technical education through its ingenious learning methodologies. The laboratories are designed with highly sophisticated equipments and instruments which provide ample of opportunities to students for grasping practical knowledge and implementing theoretical classroom learning in practice. Various student forums related to technical science, sports and cultural activities contribute towards the development of the co-curricular activities of the students. The contribution made by the faculty members have

VISION

"Envisioning to be a world class technical institution by synergizing quality education with ethical & moral values."

MISSION

"To provide quality & stimulate innovation in technical & professional studies"

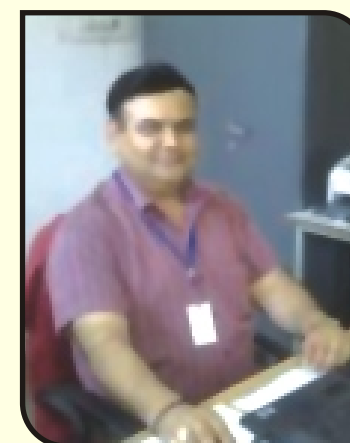
Chairman's Message

Maharaja Agrasen College of Engineering & Technology (MACET) was established with a vision to impart futuristic technical and management education with high values of discipline, morals and concept of noble thinking. We train and nurture students in such a manner that they realize their full potential and put in their best to gain knowledge and become worthy professionals, who would proudly serve the nation and face the corporate world with confidence and commitment. Since its inception, MACET has laid a lot of emphasis on quality education. We developed and introduced a system of quality assurance, which on a continuous basis evaluates and monitors the quality of theoretical and practical knowledge imparted to students. We boast on our intellectual capital - the rich and strong faculty who whole-heartedly implement our quality policy. Our intentions are to mould the raw minds into perfect personalities, fit not only for the job market but to lead a happy and purposeful life wherever they go and whatever they do. We wish MACETians to be responsible citizens of the nation without compromising on moral and ethical values.



Mr. Naresh Kumar Gupta
Chairman

Director's Message



Dr. Vinay Dwivedi
Director

The wealth of a nation is upheld in the number of educated men and women it harbors. In the competitive world where knowledge determines the winners and losers, it has become increasingly necessary to ensure that, beside a sound education, students must have the ability to excel and win in the global context. Believing that knowledge is power, knowledge is safety and knowledge is happiness, we endeavor at MACET to equip our students with latest subject knowledge and strive to create a learning culture that promotes quality, innovative exploring and discipline. MACET aims to provide the right direction to the teenagers who can focus on their future, right from the beginning of their career. MACET extends all support for academic and personal growth of the students in order to convert them as responsible engineers /managers to meet the challenges of industries. Attendance in the classes is most important for us, whether a student or a teacher, class is of primary importance. This is the fundamental steps for success. This seems to be a little harsh but in fact it lays the basic foundation of our Academic Programme. In our Institute we are providing best possible opportunities and infrastructure for nurturing the students in a peaceful environment. Our academic programmes are growth oriented & relevant for developing critical thinking & problem solving skills. We intend teaching-learning mechanism to be at par with the international standards and firmly believe that by imparting quality education our students will be ready to compete globally for international jobs. You are now embarking on a great learning adventure and you may face challenges of varying degrees and nature ahead. But I am sure those challenges will inspire you further and undoubtedly you will be the achievers at the end. My view is that emphasis in placement and career choice should be highly inclusive and identify the components of academic excellence needed to do so. Once you pass through the portals of MACET , the road ahead will be opened for journey of wonderful life. I also know for certain, that you will lead the change of tomorrow and the world will seek you proactively. We profess to our students when the going gets tough, tough gets going.

At present we are offering the course in the following disciplines:-

B.TECH.

- ❖ Electronics & Communication Engineering [ECE]
- ❖ Electrical & Electronics Engineering [EEE]
- ❖ Computer Science & Engineering [CSE]
- ❖ Information Technology [IT]
- ❖ Civil Engineering [CE]
- ❖ Mechanical Engineering [ME]

Eligibility Criteria :

1) Direct admission to first year B.Tech:

Candidate must have clearly passed intermediate examination of U. P. Board or 10+2 level examination or its equivalent from any recognized Board / University and securing minimum 50% marks (45% marks for SC/ST Category candidates) without grace in required subject combination (2 compulsory & 1 optional taken together).

2) Direct Admission(lateral entry) to Second Year for Engineering Diploma holder & B.Sc Graduates:

Candidates who have passed three years Engg. Diploma in any branch of engineering except Agriculture from any recognized Institution by the Board of Technical Education, U.P. with minimum 50% marks (45% for SC/ST) marks in aggregate without any grace marks, are eligible for admission to second year in any branch of engineering. Candidates who have passed three years B.Sc. degree from any recognized University and passed XII standard with mathematics as one of the subject; securing minimum 50% marks (45% for SC/ST) in aggregate, are also eligible for admission to second year in any branch of Engineering / Technology.

POLYTECHNIC

- ❖ Mechanical Engineering(Production)
- ❖ Electrical Engineering
- ❖ Civil Engineering

Eligibility:

Candidate who has passed High School Examination with Science & Mathematics from U.P. Board or its equivalent from any recognized board and securing minimum 35%.

Department of Computer Science and Engineering

The Department of Computer Science and Engineering at MACET is renowned for cutting edge research and imparting state of the art education. The department intends to help the students to reach their full potential by providing them the knowledge to meet the challenges of designing and developing computing software systems and algorithms. The department promotes active industry-institute collaboration by identifying areas of interest and taking part in sponsored research projects and consultancy services. Some of the major research areas which the faculty members and students working on are Networks, Database, Theoretical Computer Science, Multimedia, Image Processing, Software Engineering and Data Mining.



The Department has following Labs:

- | | |
|-----------------------------|----------------------------------|
| ➤ Data Structure lab | ➤ Computer Network Lab |
| ➤ Numerical Techniques | ➤ Web Technology based |
| ➤ DBMS Lab | software Engineering Lab |
| ➤ Computer Organization lab | ➤ Object oriented Techniques Lab |
| ➤ Algorithm Lab | ➤ Compiler Lab |
| ➤ Operating System Lab | ➤ Digital Image Processing Lab |
| ➤ Distributed System Lab | ➤ Artificial Intelligence Lab |
| ➤ Computer Graphics Lab | |

Department of Electronics and Communication Engineering

Electronics is the branch of engineering that has revolutionized the life style of humanity. It is truly a trend setter & a prime mover behind the transition to a smart technological society. In present era the field of electronics & communication plays an important role in almost every sphere of our life. Radio, Television, Telephones, Computers, Automobiles, Office machineries & home appliances, life saving medical equipments & space vehicles represent a mere sample in the wide spectrum of application of Electronics. Communication equipments such as Cellular phones have penetrated every layer of our society with rewarding opportunities in communication and navigation industries. In MACET, the department of electronics and communication engineering provides Undergraduate program. This mainly deals with the basic electronics components, design of circuits & systems, communications technologies and equipments. The department is established with well equipped laboratories and research facilities. These laboratories provide platform for learning not only theory but also practical aspects of electronics and communication engineering. Several workshops on embedded technologies and competitions like 'ROBOWARS' and 'ROBORACE' are organized from time to time to make students aware with latest development and challenges in the stream. The department has faculty members with various specializations at post graduate and doctorate level. Our highly experienced faculty members are from Reputed Universities and they have immense teaching experiences. Several research papers have been published by our faculty members in different national and international journals. The department has a close interaction with alumni and is continuously striving for improvement of the curriculum and research facilities. With this exemplary team and environment the mission of the department is to train the students to meet future global challenges and industrial requirements.



The Department has following Labs:

- Electronics Engineering Lab I & II
- Digital Electronics Lab-I & II
- PCB & Electronics Workshop
- Measurement Lab
- Integrated circuits Lab
- Control Systems Lab
- Communication Lab- I & II
- CAD of Electronics Lab
- DSP Lab
- Microwave and Fiber Optic Lab
- Electronics Circuit Design Lab.

Department of Information Technology



The department of Information Technology was established with the aim of developing good technocrats who are well-equipped with the knowledge and skills to cope up with the needs and challenges of this dynamic field. The department has proven itself as a center for excellence, innovation and research, with dedicated faculty, highly motivated students, state-of-the-art facilities and an innovative teaching-learning environment.

The Research & Development activities of the faculty and the focus of research oriented student projects have resulted in several publications both in International and National Conferences as well as reputed Journals. The department has already demonstrated its potential for excellent research. Our students have consistently achieved excellent placements.

The department is fully networked with high speed internet connectivity.

The Department has following Labs:

- OOPS Lab
- Software Engineering Lab
- DBMS Lab.
- Computer Organization Lab
- Operating System Lab
- Algorithm Lab
- Computer Graphics Lab
- Computer Network Lab
- Software Project Management Lab
- Cryptography & Network Security Lab
- Artificial Intelligence Lab
- Distributed System Lab

Department of Mechanical Engineering

Mechanical Engineering is another core branch of the Engineering with involvement of engineering professionals towards major activities in the global development and its principles are involved in the design, study, development and managerial control over nearly all of the physical devices & systems. This branch is involved from transport to space research, manufacturing of raw steel to nano-technology & so on.

The department is unique in having the most spacious workshop and full fledged Mechanical Engineering laboratories. Experienced and dedicated faculty members focus on imparting quality education, through well planned lectures, tutorials and practical session.

The Department has following Labs:

- Material Science and Testing Lab
- Thermodynamics Lab
- Fluid Mechanics Lab
- Manufacturing Science-I & II Lab
- Measurement & Metrology Lab
- Electrical Machines & Automatic Control Lab
- Machine Design-I & II Lab
- Heat and Mass Transfer Lab
- Fluid Machinery Lab
- Theory of Machines Lab
- Machine Tool Design Lab
- Machine Drawing-I & II



Department of Civil Engineering

Civil engineers, plan, design, build and maintain the facilities essential to our modern civilization. Civil engineering is one of the most enriching careers open to students fetching self fulfillment and dedicating their service to the community at large. Today, society faces serious challenges dealing with finite non renewable resources, climate change, expanding population and aging infrastructure system. These issues can be successfully addressed with the direct involvement of Civil engineers who are committed to the fundamental concepts of renewability, sustainability, livability and safety. Our institution has offered comprehensive programs for students. Not only do we prepare our graduates for a career in Civil engineering, but we emphasize the need to make a positive contribution for the betterment of society. The civil engineering department pride itself on providing students with the necessary personal attention and guidance to develop their own engineering skills and changing social expectations of the profession. At MACET, course work includes laboratory experiences that provide opportunities for practical, handon - experimentation to illustrate classroom concepts. The Civil Engineering department features laboratory for Surveying, Geotechnical, Environmental, Structural and Hydraulics for demonstrations and investigations of theoretical concepts. Our window and UNIX platform computer laboratories are available with industry standard software.



The Department has following Labs:

- Building Materials Lab
- Surveying Lab
- Building Planning & Drawing
- Cad Lab I & II
- Structural Analysis Lab
- Quantity Surveying & Estimation
- Geo-informatics Lab
- Environmental Engg. Lab
- Hydraulics & Machine Lab
- Structural Detailing Lab
- CBNST Lab
- Geotechnical Engg. Lab

Department of Electrical & Electronics Engineering

Electrical engineers have made remarkable contribution to our world. It is one of the core fields of engineering, so it is always promising in terms of scope and job prospects. Electrical engineering is the heart of entire engineering discipline and therefore its scope will never fade even many years from now. Electrical engineers are needed in all manufacturing unit, all major companies of public and private sector such as Electricity Boards, Large Scale Industries, Manufacturing Plants, Power Corporations, Hydro-Electricity sector etc. Electrical engineering thus deals with study and application of electrical systems for use in these different environments. It equips you with the knowledge of Generation, Transmission and Distribution of electrical power as well as instrumentation, control system, understanding electrical and electronic networks etc. With a team of highly experienced faculty members, who have completed their degree from top institutions in India, established the Department of Electrical Engineering at MACET. The department with well structured labs and dedicated members provides descriptive knowledge from the basics to the industrial aspects of the discipline. The mission of the department is to impart quality technical education, to provide industry ready engineers and to create centers of excellence in the field of electrical engineering through collaboration with industries.



The Department has following Labs:

- Electrical Measurement Lab I
- Electrical Simulation Lab
- Electromechanical Energy Conversion
- Electrical Instrumentation Lab
- Power Electronics Lab
- Communication Engineering
- Network Lab
- Control System Lab
- Power System Lab.
- Electric Drives Lab

Department of Applied Sciences and Humanities

Department of Applied Sciences and Humanities at MACET is continuing from the date of its formation for imparting teaching and promoting implementation of theoretical & practical aspects of Applied Sciences to build a solid foundation as part of the Engineering Education. Department provides strong foundation at the first year stage so that the grasp of engineering streams becomes easily accessible. The clarity of concepts in pure sciences go a long way to help them in engineering streams. The department has five main streams, namely: **Physics, Chemistry, Mathematics, Environmental Studies and professional communication.** The Department of Applied Sciences and Humanities at MACET is one of the indispensable departments which imparts excellent quality education for the future technocrats of all streams and enhances innovative thinking among the students. The Department has well equipped laboratories for Physics, Chemistry and Professional Communication (English). It organizes regular research seminars where one or the other faculty member reports about his research work or talks on a topic of general interest. The department has been giving best results continuously since its formation & same is expected in the coming years. The department also emphasizes on improving the communication skills of the students by organizing regular group discussion and debate.



The Department has following Labs:

- Physics Laboratory
- Chemistry Laboratory
- Communication Lab



Campus at a Glance

1. Classrooms

The well-furnished classrooms at MACET provide the most conducive environment for dynamic and focused learning and teaching. They are designed in such a manner so as to facilitate customized attention to each student. The lecture rooms are equipped with whiteboard & LCD Projector and Audio Visual systems for effective learning.



2. Seminar and Conference Hall

The Institute has a well-equipped Seminar Hall with a capacity of 200 people for conducting different programmes. We have fully air conditioned and spacious conference hall which has a seating capacity of 60 people with complete audio visual systems. Air-conditioned.



3. Workshops

The institute has developed a well-equipped workshop for the training of students. The workshop comprises of different shops which provide facilities to the students to learn various production, processes & seek exposure to industrial machinery and equipments. The workshop has the following shops: Carpentry shop, shop, Welding shop, Sheet Metal shop, Machine shop, Foundry shop.



4. Hostel

"Hostel serves as the home away from home". MACET has separate on-campus hostel facility for both the Boys and Girls, which is embedded with amenities such as a common room, indoor games room, and a dining hall with mess. Students are provided with 24x7 hours Wi-Fi internet connectivity.



"Ragging is strictly prohibited."

5. Library

Library is the backbone of any civilized society and heart of any academic institution. Thus the Library also acquires a prominent place among the students and faculty. The library at MACET is fully automated with a collection of over 25,000 books of engineering as well as management studies. Library at MACET has well furnished reading rooms with the seating capacity of more than 200 users and has a very rich collection of reference books and journals. Keeping in view the fast changes in technology, the knowledge base of the library is updated regularly by way of adding new literature in the form of text books, reference books, reports, proceedings, abstracts & indexes, encyclopedias, data books, standards (National & International), Journals etc.



6. Mess & Cafeteria

As "**health is an ultimate wealth**", nobody can ignore the important role played by nutritious and hygienic food in contributing to one's state of well-being. Far away from home when students are intensively focusing on their career plans, their health becomes a very sensitive issue. Thus with the aim to provide MACETians with the best quality of snacks & food the cafeteria & mess serves the delicacies of different Indian cuisine of essential nutritional value and a pleasure for all the students to relish their taste. Keeping in view the financial limitations of the students, food is served at a very economical price.



7. Playground

As we all know that "**All work and no play make jack a dull Boy.**" A sedentary life style and spending long hours of engineering studies will deteriorate a healthy body. Our beautiful playground for cricket, volleyball, badminton etc. with all upgraded amenities gives space to students to flex their muscles and stretch their limbs to uplift their sinking moods and spirits. The institute is under process of developing a swimming pool and a gymnasium.



8. Transport facility

The college provides bus facility for students and faculty members both, so that the academic session can run smoothly and timely. A fleet of vehicles ply between the college and all important landmarks in the city so that students may not be dependent on public transportation.



9. Educational/Industrial Tour

The MACET also offers opportunity of Industrial Tour & Plant visit for the Students which help them to interact with real life situation. MACET regularly invites eminent scholars & professionals from various industries for guest lectures and seminars where they share their experiences with the students.



10. Extra Curricular Activities:

(a) Sports Week:

A "Healthy mind lives in a healthy body", going by this saying at MACET, apart from regular sports activities, we conduct a sports week annually to recognize and nurture sporting talents in our students.

(b) Cultural Activities:

We celebrate our annual function by the name of "SRIJAN". In **SRIJAN-2013** different events were organized in cultural and other socially relevant topics. Cultural events included group dance, solo dance, group song, solo song, drama etc.

(c) Extensive Lectures & Seminars:

Acquiring knowledge and gaining exposure from the practical world is the greatest value addition to the theoretical base that can be availed by a student. The seminar committee acknowledges the students' zeal for learning from the experts of the corporate world and thus, arranges lectures and seminars from time to time. These eminent personalities are invited to the campus to share their knowledge with the student and in a way guide the student to learn from their knowledge and experiences. These interactions help the students to gain an insight into various subjects.

(d) Robotics:

Robotics is the science that deals with the technology of robots, their design, manufacture & applications. Robotics offers tremendous job opportunities due to its application from small level embedded systems to highly complex & structured applications like space science, medical science under water drones, industrial designs, farms, etc. Robotics design and manufacture involves almost each branch of Engineering. In MACET, regular Workshop on Robotics and Embedded System design helps the students to understand the basic as well as industrial requirements.

Training and Placement Cell:



The placement cell of MACET is in continuous interaction and in liaison with Corporate Houses and Govt. Undertakings. For industrial training and campus placement of the B.Tech students. This process is engaged through modern training facilities and innovative methodology which works for satisfying the objective of providing career guidance to students, and co-ordination with prospective external agencies/ industries/ companies and suitably catering the needs on both sides. The placement cell of the college is managed by the Placement Committee consisting of placement officers, faculty members and student representatives. It aims at helping every student to plan his/ her career and find a job opportunity of his/her interest MACET has organized Mega Placement Fair as "MACET Job Fair 2013", held on April 13-14, 2013 with an overwhelming response from more than 1000 entries of job seekers and more than 25 Companies across the region. This event increased awareness of business and employment opportunities available in different fields and it has also enabled our students to discuss their career and training opportunities face to face with the employers. We at MACET put conscious and constant efforts through different sets of pedagogical tools to develop students holistically and make them industry ready, which is more focused on imparting application based learning, to equip our students to meet contemporary challenges of corporate world. We are looking forward for same support and assistance from our recruiters and alumni in shaping the career of our students.

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