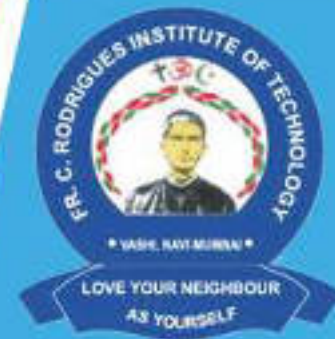




Fr. C. Rodrigues Institute of Technology

Admission Brochure



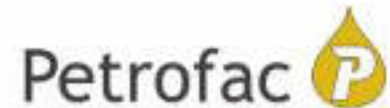
Our Recruiters



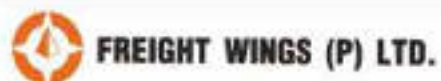
SIEMENS



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Message from the MD's Desk



Fr. Saturnino Almeida, Managing Director

“Any sound disciplinary policy should aim at education rather than punishment, constructive correction rather than reproof and ‘what is wrong’ rather than ‘who is wrong’.

Treat a man as he is and he will remain as he is. Treat a man as he can and should be and he will become as he can and should be.” — Goethe

In the course of its relatively brief existence of twenty three years, Fr. C. R.I.T has established its reputation as a centre of holistic development. The focus here is on moulding students into not just knowledgeable and capable engineers but also into individuals with strength of character. Hence, the inculcation of timeless values and multi-dimensional development of the personality is every bit as important as the imparting of sound technical knowledge and skills.

Discipline is the foundation stone upon which rests the edifice of learning. A dedicated and committed teaching staff takes painstaking efforts through a multi-pronged system comprising lectures, seminars, presentations and projects to make sure students understand fundamental concepts and theories.

But more importantly they use a well-entrenched disciplinary system of strict attendance records and periodic tests to ensure that students take the trouble to learn on a regular basis the knowledge that is offered to them. This accounts for, to a large extent, the consistent record of excellent academic results and university ranks.

Apart from being the first engineering college to win the University of Mumbai basketball tournament, it made its mark in the realm of paper presentations and quiz competitions. In fact, its quiz team, this year, completed a hat-trick of wearing the Mumbai University crown and topped it off by winning the first prize at the national level.

The management philosophy of Agnells upholds the belief that the core objective of all education is to enable every student to accept him/herself as valuable, competent and capable of managing his /her own life in relation to the world around. To this effect, impetus for spiritual and emotional growth is provided through annual orientation sessions, while physical conditioning and disciplining is fostered through a compulsory trek every semester.

Fr. C.R.I.T is the only engineering college to conduct a morning assembly where punctuality and good behavior are vigorously encouraged.

We are indeed glad that all our branches were approved by the N.B.A. for accreditation but we also recognize that the true worth of an institution is gauged by the quality of students that emerge from it. It is our constant endeavor to develop students who are equipped to not merely survive the fierce jungle of industrial competition but rather to contribute towards the evolution of that environment into a humane, just, safe and beautiful world for humankind.

Matter of Commitments

The Agnel Ashram Fathers – a group of Catholic priests and brothers, along with some well educated, dedicated, zealous and patriotic co-workers have, during the last 5 decades, built up a large well-knit family of committed individuals. Rising above all religious, communal and social differences, this unique family, which is spread over different parts of the country, has been instrumental in propounding a MOVEMENT that has sent outstanding waves in the realm of Education. Starting with the pre-school level, this MOVEMENT seeks to touch the lives of students and citizens of India, right up to the graduation and post graduation level, in such a way that every student entrusted to the care of an Agnel Ashram Fathers' institution, grows into a balanced, versatile and courageous individual who has the physical, mental, emotional and spiritual strength to face the challenges of life.

This large Agnel Ashram family today, comprises over 30,000 students. Steadily adding to this number, are their parents, siblings, close family members and friends, because this MOVEMENT believes in the truth that 'the Institute is but an extension of the home sweet home'. With the passage of time there is yet another branch that this Agnel family tree can speak of i.e the large number of ex-students and their families, who have a strong sense of belonging to their Alma Mater. Thus what emerges is a large populace of over 100 million committed countrymen, who not only nurture a healthy feeling of pride and love for our Motherland, but also experience the joy of being an unique element of – VASUDHAIVA KUTUMBAKAM - the world is one family.

This Agnel Ashram Family Movement originated way back in 1957 in Mumbai. The humble beginning was in Bandstand, Bandra and over the years it has spread its wings and established institutions in Navi Mumbai, Pune, Goa, Delhi, Noida, Greater Noida and in Ambernath. Believing in the guiding principle that "every student entrusted to us is a special gift of God, to be lovingly looked after and cared for", the Agnel Ashram Schools, Polytechnics and Engineering Colleges have

set the highest standards of academic and overall excellence. It's a matter of pride that some snags which had occurred in a small part of the radar, which was used in the first Indian satellite, ARYABHATTA, were repaired and set right in the workshop of Fr. Agnel Polytechnic, Bandra. Likewise, Fr. C. Rodrigues College of Engineering situated on the sea front at Bandra, has over the years established itself as one of the leading Engineering Colleges affiliated to Mumbai University. At Vashi, Navi Mumbai what started as a small school in 1982, has subsequently expanded and grown into a sprawling campus housing the Agnel Technical and Educational Complex. Besides the schools (English & Marathi Medium) and Jr. College, this complex houses the Industrial Training Institute, Agnel Polytechnic, Fr. C. Rodrigues Institute of Technology (Engineering College) and the Fr. C. Rodrigues Institute of Management Studies started in the academic year 2000 -2001.

The Fr. C. Rodrigues Institute of Technology (Fr. C.R.I.T.) ever since its inception, in just a short span of time, has established itself as one of the leading Engineering Colleges in Mumbai. This fact is well supported by its excellent results in the University examinations as well as by the extensive facilities provided by the college. This had led to the college being awarded with an 'A' Grade in its very first assessment by the Government of Maharashtra. In addition, National Board of Accreditation (NBA) constituted under clause 10 (V) by AICTE act 1987 awarded accreditation to the College in July 2006 and reaccreditation in Aug 2012.

Vision and Mission

Our vision at Fr. C. Rodrigues Institute of Technology is not only to impart professionally sound education to our students, but also to inculcate in them, values of secularism, discipline, faith in hard work, truth, honesty and brotherhood. This, we believe, will help the students to emerge as responsible citizens, legitimately proud of their rich national heritage and to experience with deep feeling, the joy of being a part of this large human family. We continuously look for adequate means to provide our students with the right skills so that they tune themselves to make the right strides in their pursuit of true success, in this era of 'survival of the fittest'.

It is our firm belief that only sincere love for one another can lead to the fullest realization and accomplishment of one's own self which is reflected in the establishment of its social cell. All this is the progressive upholding of our motto - "Love Your Neighbours As Yourself". This leads us, namely all the members of the Agnel Family, to the gradual and full realization of the great truth in VASUDHAIVA KUTUMBHAKAM - the world is one family.

Vision Statement

To evolve and flourish as a progressive centre for modern technical education, stirring creativity in every student leading to self-sustainable professionals, through holistic development; nurtured by strength and legitimate pride of Indian values and ethics.

Mission Statement

- To provide industry oriented quality education.
- To provide holistic environment for overall personal development.
- To foster relationship with other institutes of repute, alumni and industries.

Institute Quality Policies

- Conform to the requirements of regulatory authorities.
- Quality assurance in teaching-learning processes through best practices.
- Ensure transparency in continuous evaluation through fair practices.
- Ensure best academic ambience by providing state-of-the-art infrastructure.
- Encourage overall development of students through co-curricular and extracurricular activities.
- Promote collaborative learning and research through interaction/partnership with industries and research organizations.

Courses Offered:

UG courses (intake 60 each)

1. Mechanical Engineering
2. Electrical Engineering
3. Electronics and Telecommunication Engineering
4. Computer Engineering
5. Information Technology

PG courses (intake 18 each)

1. Mechanical Engineering (Machine Design)
2. Electrical Engineering (Power Electronics and Drives)
3. Electronics and Telecommunication Engineering

Research Center (intake 10 each)

1. Mechanical Engineering
2. Electrical Engineering
3. Electronics and Telecommunication Engineering

Program Outcomes

Programme Outcomes are narrower statements that describe what students are expected to know and be able to do upon the graduation. These relate to the skills, knowledge, and behaviour that students acquire in their matriculation through the programme.

- PO 1 :** Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- PO 2 :** Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- P 3 :** Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate considerations for public health and safety, cultural, societal and environmental consideration.
- P 4 :** Conduct investigations of complex engineering problems using research based knowledge research methods including design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions
- PO 5 :** Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO 6 :** Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.
- P 7 :** Understand the impact of professional engineering solution in societal, and environmental context and demonstrate knowledge of and need for sustainable development.
- PO 8 :** Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- PO 9 :** Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.
- PO 10 :** 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.
- PO 11 :** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
- PO 12 :** Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.

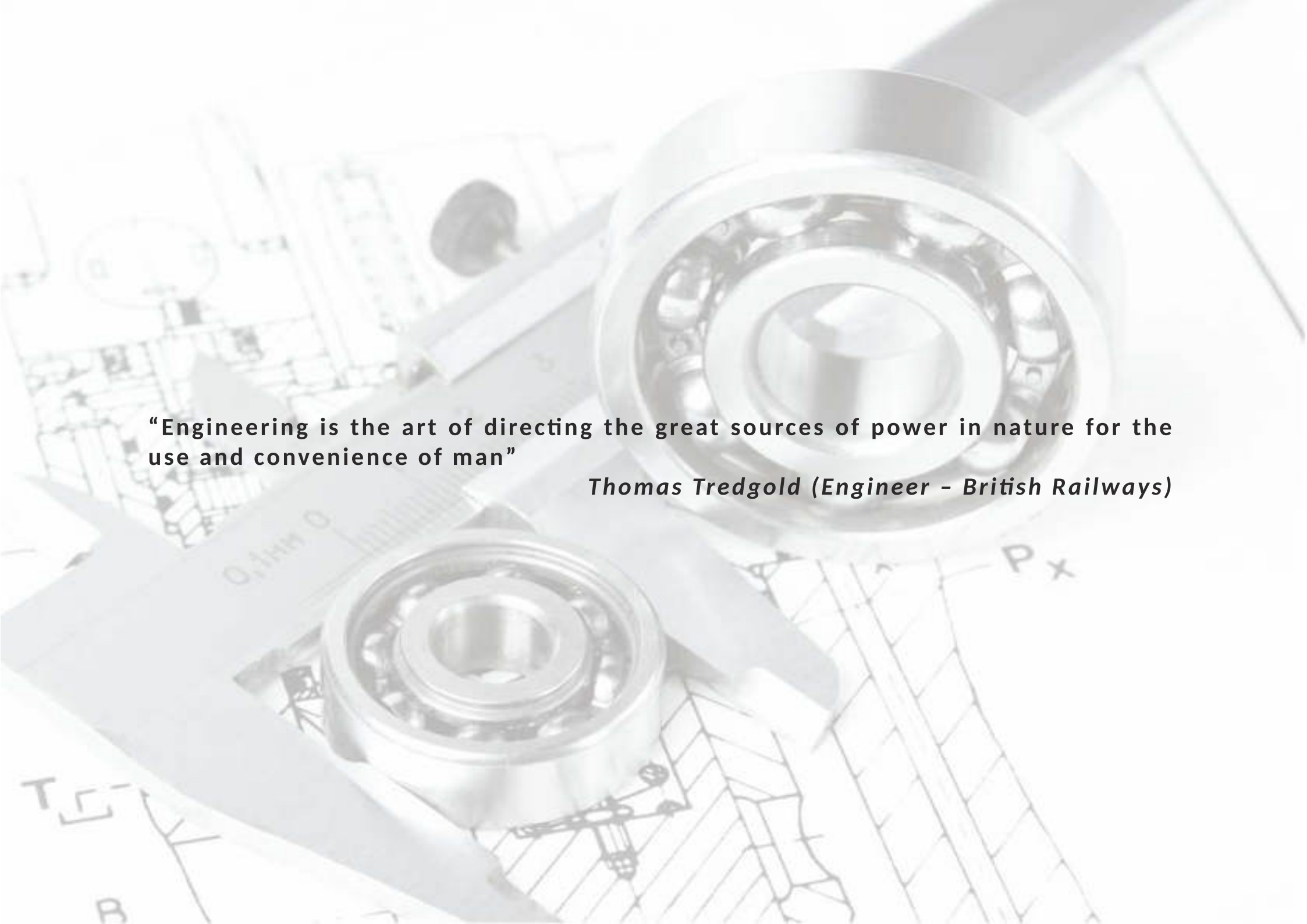


ANNEX BUILDING FOR ENGINEERING



Mechanical Engineering

Courses Offered : UG, PG, Ph.D.



“Engineering is the art of directing the great sources of power in nature for the use and convenience of man”

Thomas Tredgold (Engineer - British Railways)

Introduction

The Mechanical Engineering Department was established in 1994 with the inception of the institute to produce high quality engineers in the field of Mechanical Engineering to cater the needs of core industries and research in this domain. The Department offers following courses

1. The Bachelor of Engineering (BE) degree (undergraduate),
2. The Master of Engineering (M.E) degree in Machine design (post graduate) and
3. The Ph.D. Degree in Mechanical Engineering.

Recognition at National Level

The Bachelor of Mechanical Engineering programme was accredited first time in year 2006 by the National Board of Accreditation, New Delhi, and is re-accredited for the period of two years w.e.f. 28-08-2012.

***Our Vision:* To provide a vibrant academic, research and industrial environment for creating self-sustainable professionals**

Mission

1. To providestate-of-the-artinfrastructureandqualityeducation.
2. To generateopportunitiesforstudentstoprovideindustrialandsocietalexposureincollaborationwithcorporatesand academia.

UG Program Educational Objectives (PEO's)

- Be conversant with engineering knowledge and modern tools and techniques.
- Have interdisciplinary exposure to develop sustainable solutions.
- Haveadequate competence for ready employability.
- Havestrongfoundationandcreativitytopursuehigherstudies.
- Becomeresponsiblecitizens.

All the above objectives are set to transform our students into good technocrat along with good citizens:

UG Program Specific Objectives (PSO's)

To meet the Outcomes with the Objectives, the following additional content (Program Specific Objectives), in addition to curriculum prescribed by University of Mumbai, has also been provided to the students. At the end of the bachelor of Mechanical Engineering program, the graduates will be able to:

PSO 1 : Apply knowledge in the field of Mechanical Engineering and develop solutions to societal needs.

PSO 2 : Pursue higher studies and take up corporate challenges professionally.

UG Course Content

In the constantly evolving technological scenario, Mechanical Engineering has been the very backbone of the industrial infrastructure. The study of fundamentals of Material Sciences, Advanced strength of Materials, Fluid Mechanics, Hydraulic Machines, Power Plant Engineering Design of Mechanical Systems, Heat Transfer, Refrigeration and Air-conditioning etc, provides students with the necessary background to face the challenges of the real world as they step out of the Institute. Apart from these conventional subjects, advanced subjects like - Finite Element Methods & CAD/CAM (Computer Aided Design / Computer Aided Manufacturing), Mechatronics, E-commerce are also taught as an attempt to bridge the gap between the fast changing Industrial scenario and University learning.

Department Strength: Staff, Students & Laboratories

The Mechanical department is fortunate to have an excellent team of 21 Full Time Teaching and 7 Non-Teaching staff. Four faculty members out of the 21 are doctorates, 2 are pursuing PhD and 15 are postgraduates (M. Tech / M.E. / MS). Eleven faculty members have a teaching experience of more than 10 years.

Also, Students admitted in the first year Mechanical belong to good merit rank as per CET scores with 100% admissions.

The department has 13 well-equipped laboratories for all subjects to cater to the needs of the University of Mumbai curriculum effectively. All these laboratories have state-of-the-art equipment and have latest softwares like AutoCAD, Ansys, Pro-E, MatLab, LabVIEW, Data Acquisition System from National Instruments, FFT Analyzer etc.

The **Refrigeration & Air-conditioning laboratory** has the Air Conditioning test rig apart from conventional Refrigeration & Air Conditioning test set-ups.

An **Internal Combustion Engines laboratory** consists of 2-stroke & 4-stroke Petrol engines & Diesel engine test rigs.

The **Mechatronics & Robotics laboratory** comprises of 2-axis Pneumatic Robot, Pneumatic & Electro-Pneumatic systems for automation, Programmable Logic Controller & Simulation software, various Electronics and Electrical sensors, actuators, micro controllers etc.

The Engineering Mechanics, Strength of Materials, Fluid Mechanics, Hydraulic Machines, Dynamics of Machinery, Mechanical Engineering Measurements, Metallurgy and Mechanical Vibration laboratories are well equipped with experimental set-ups & machineries. A CAD-CAM laboratory is equipped with CNC lathe, CNC milling machine, CNC milling trainer & CAD workstations loaded with latest software such as ANSYS, Pro-E, and Auto-CAD. The concept of CIM (Computer Integrated Machining) is being implemented currently.



CAD CAM Lab



CNC Lab



Heat Transfer Lab



VibrationLab

All laboratories are well developed to fulfil the curriculum requirements. In addition laboratory facility is available for research in the area of Mechanical Vibrations, such as B&K LDS Photo + FFT Analyzer, Sensor and Impact Hammer, virtual Instrumentation set up is available with National Instruments and 'LabView' Control Design and Simulation Module for research in the area of Data Acquisition Systems.

The Post Graduate course in Mechanical – Machine Design, offered by our department, encompasses subjects which are playing a vital role in today's globalized industrial environment in India. The subjects cover various areas of engineering such as Mechanical Vibration, Stress Analysis, Instrumentation and Control and CAD-CAM. The course in our Institute will not only educate the Professionals in the subject but also inculcate in them the traits of experimentation, application and implementation of new ideas in practical use.

The Department is also recognized as an approved Research Centre by Mumbai University and has invited applications for Ph. D. in Mechanical Engineering from the academic year 2013-14. This will contribute to the research in the field of mechanical engineering technology for the industries so that R & D can play a key role in establishing self-reliance.



Internal Combustion Engine Lab.



Measurement Lab.



Mechatronics Lab.

*Refrigeration &
Airconditioning
Lab.*



*Theory of
Machines Lab*



Professional Society Activities

Mechanical Engineering Students' Association (MESA)

Mechanical Engineering Students' Association (MESA) is not a professional Society but works on the same ground. The objective of MESA is to create opportunities for the students to enhance their knowledge about the latest developments in the technological world, by organizing various events. MESH and SYNERGY are the two events which MESA organizes annually one in each semester. Also it takes efforts to organize additional events such as Career Guidance, Poster Presentation competitions, Seminars, etc. for the benefit of the students.

Indian Society of Heating, Refrigerating and Air-conditioning Engineers (ISHRAE).

The HVAC & R industry is in a boom phase across the globe. There is a tremendous manpower requirement in the industry. To create awareness of the growth and potential of the HVAC & R industry and the opportunities in this field the Indian Society of Heating, Refrigerating and Air-conditioning Engineers (ISHRAE) started students' chapter in engineering colleges. The ISHRAE student chapter of Fr. C. Rodrigues Institute of Technology, Vashi sponsored by the ISHRAE Mumbai chapter was started on the 22nd day of September 2007. It maintains high standards and disseminates technical knowledge for the advancement and betterment of the science of Air-conditioning and Refrigeration. The students' chapter facilitates the active participation of students in activities like:

- ISHRAE Intercollegiate Quiz Contest
- National Level Students Paper Presentation Competition

SAEINDIA Collegiate Club, Fr. C. R. I. T. Vashi

SAE student chapter of Fr. C. Rodrigues Institute of Technology, Vashi was started on 8th February, 2011. SAEINDIA is India's leading resource for mobility technology. As an individual member driven society of mobility practitioners, the ownership of SAEINDIA wrests with its members who are Individuals from the mobility community, which includes Engineers, Executives from Industry, Government Officials, Academicians and Students. SAEINDIA is an affiliate society of SAE International registered in India as an Indian non-profit engineering and scientific society dedicated to the advancement of mobility industry in India. The students' chapter organizes 'TORQUE'- National Level Nitro-RC car competition, 'SPARKZ'- Seminars from industry professionals and Industrial Visits every year. It also facilitates the active participation of students in activities like BAJA - National Level All-Terrain Vehicle Design, Manufacturing, Racing Competition etc.

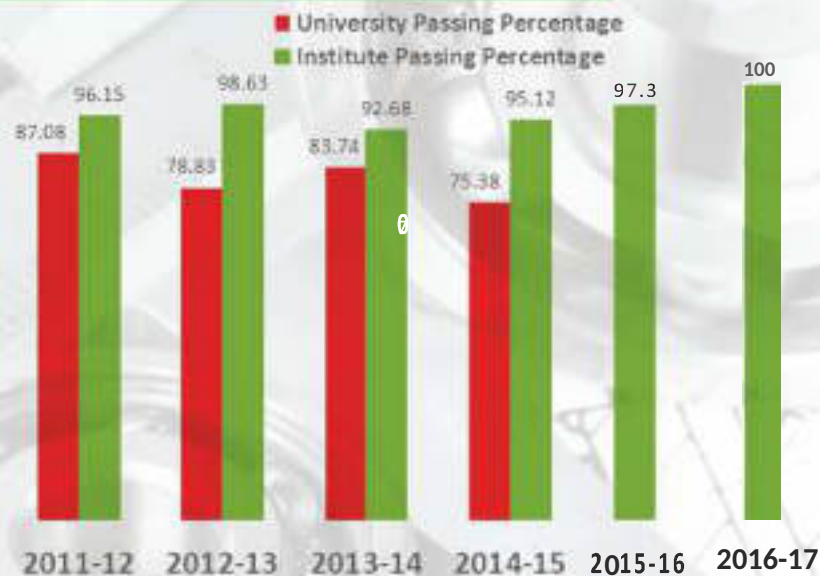
Our Achievements: Results, Placement, Staff & Student Technical Papers.

The Department has been consistently achieving excellent results with many students securing top ranks in the University.

In the past few years majority of the eligible students were placed in the top notch companies through campus interviews. Some of the companies visiting our institute for recruitment include: L&T, UDHE, Petrofac, Jacobs, Capgemini, Toyo Engg, Cybermarine, Siemens Vista Print, Godrej & Boyce etc.

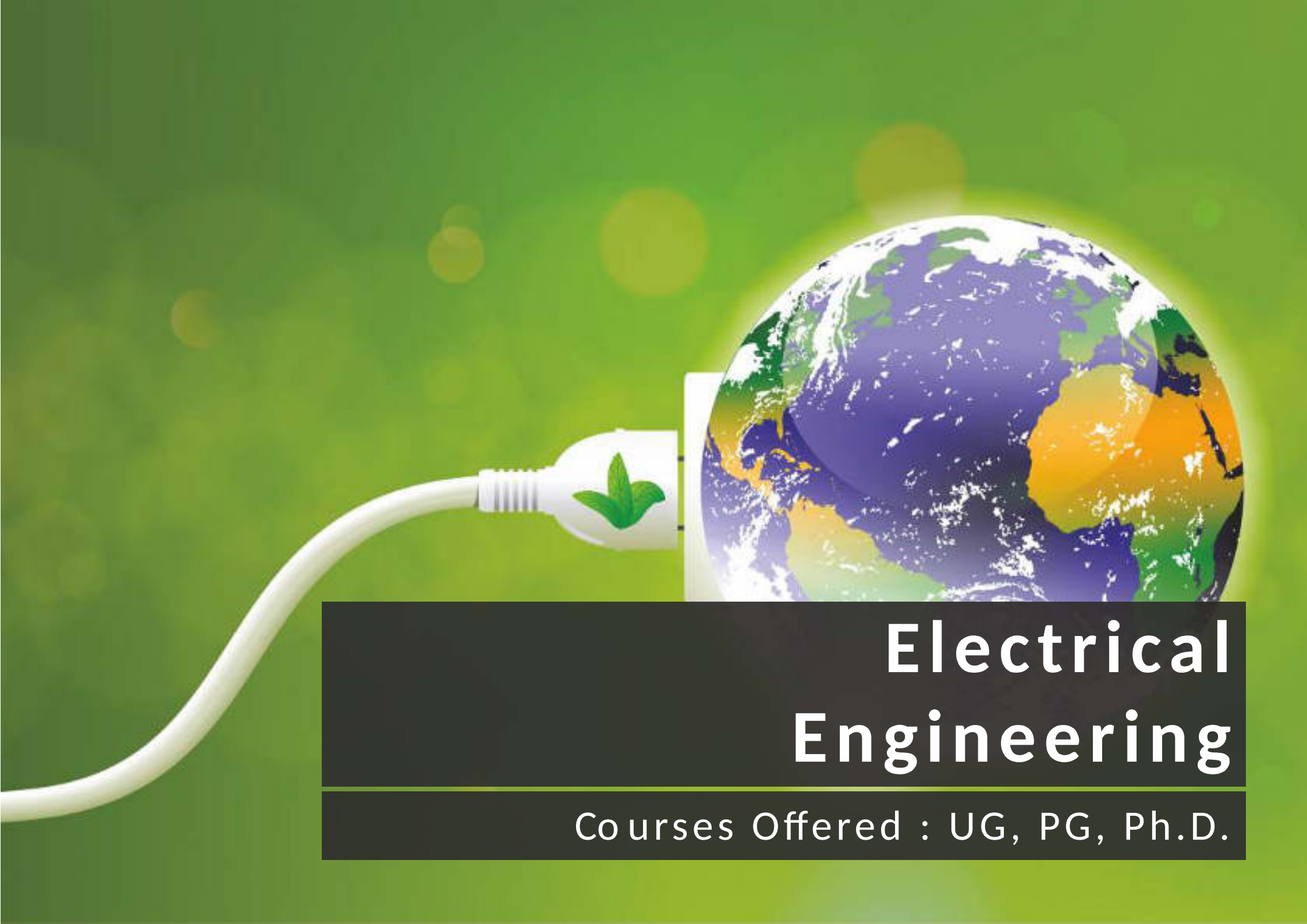
Our students and faculty members have published many research papers in various National / International conferences & reputed journals like JVC, JSMSS, Journal of Aerospace Engg., JVMAC etc.

Result



Concluding Remarks:

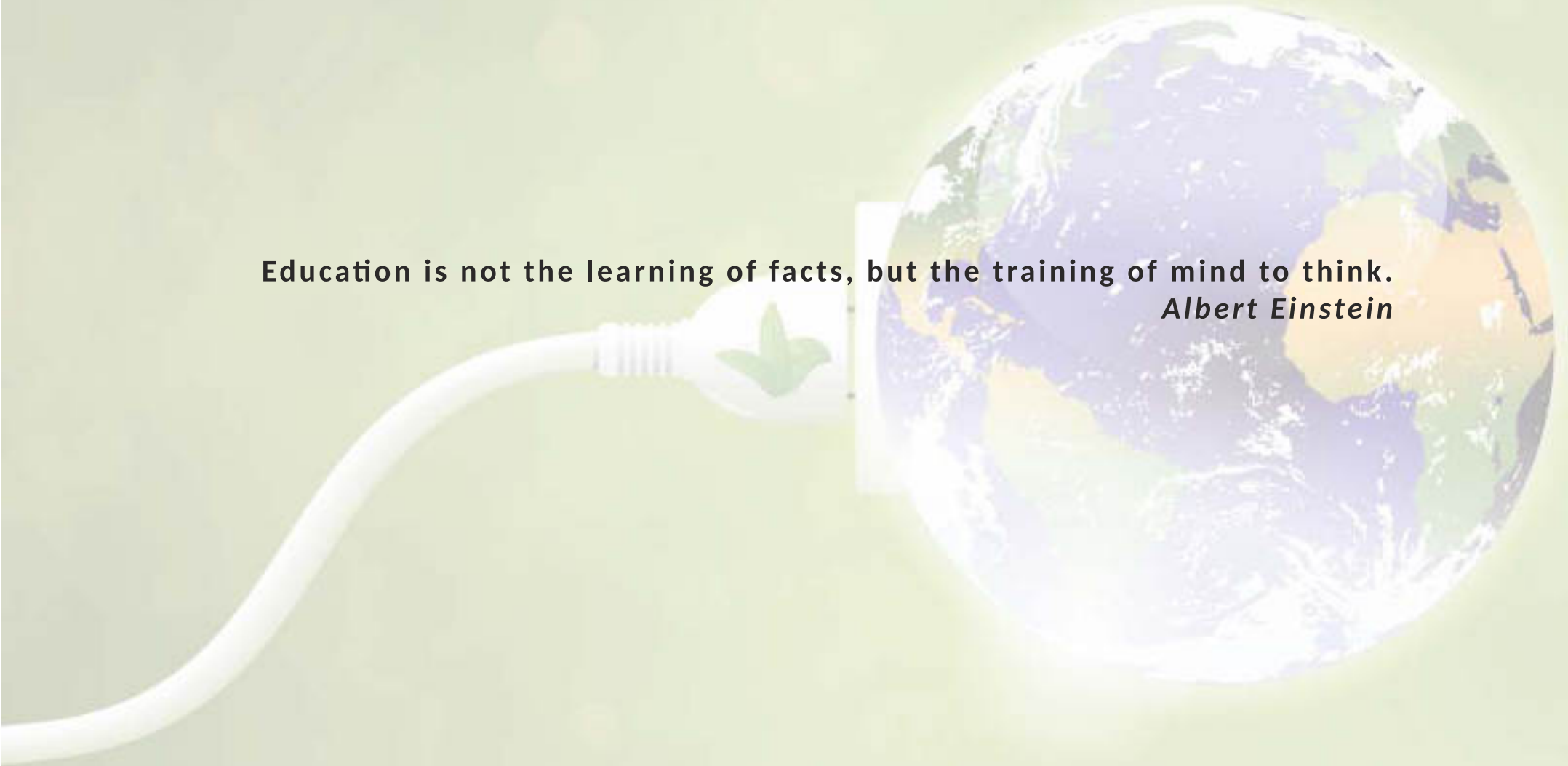
The Department contributes new knowledge through research in Mechanical Engineering and allied disciplines. In addition, it seeks to maintain recognition through scholarly work and service to the college, the University and the external community.



Electrical Engineering

Courses Offered : UG, PG, Ph.D.

Education is not the learning of facts, but the training of mind to think.
Albert Einstein



Introduction

The Department of Electrical Engineering has been playing vital role in producing scientists and technologists ever since it was established in 1994. The department runs Bachelor of Engineering, Master of Engineering (with specialization Power Electronics and Drives) and Ph.D programmes. Currently department has 18 full time faculties and 5 Lab assistants. Electrical Engineering department is one of the best amongst many of the engineering colleges affiliated to university of Mumbai and is known for its excellent placement record, best infrastructure and facilities, highly qualified and experienced faculties.

Recognition at National Level

The Bachelor of Electrical Engineering programme was accredited first time in year 2006 by the National Board of Accreditation, New Delhi, and is re-accredited for the period of two years w.e.f. 28-08-2012.

Our Vision : To evolve as a progressive centre for modern technical education in the field of Electrical Engineering to produce self sustainable professionals through value based education.

Mission

1. To provide quality education in the areas of Electrical Engineering.
2. To collaborate with Industries and Institutes of repute.
3. To provide holistic environment for the development of socially responsible citizens.

UG Program Educational Objectives (PEO's)

- PEO1: Prepare students with sound foundation in Electrical Engineering to solve real life problems using modern tools.
- PEO1: Prepare students to be successful professionals in Indian and multinational organizations.
- PEO1: Prepare students to pursue research through higher education.
- PEO1: Prepare Electrical engineers with ethical values and demonstrate the knowledge for environmental sustainability as well as safety.

UG Program Specific Objectives (PSO's)

At the end of the Bachelor of Electrical Engineering program graduates will be able to:

1. Develop capability to work efficiently in the field of power generation, transmission and distribution system.
2. Develop technical knowledge, skill and competency to design and implement electrical subsystems through electrical and electronics infrastructure and modern software tools.

UG Course Content

In our endeavour to popularize the electrical engineering field, we have included in our curriculum subjects like Design and Estimation of Electrical Systems, Electrical Machine Design, High Voltage DC Transmission System, Power Quality, Analysis and Design of Switched Mode Converters, Illumination Engineering, Project Management, Digital Signal Processing, Analog and Digital Integrated Circuits, Renewable Energy and Energy Storage, Electric & Hybrid Vehicle Technology and Microprocessors which are the fastest developing fields.

The subject 'Project Management' helps the students analyze and implement Tools and Techniques in handling projects efficiently and to become good Project Managers. The subjects like 'Renewable Energy & Energy Storage Systems' and 'Electric and Hybrid Vehicle Technology' help students to understand, evaluate and design the systems for sustainable future.

Department Strength: Staff, Students & Laboratories

To impart the knowledge, we have well qualified, experienced and dedicated staff in the department. The department has 18 Full Time Teaching and 5 Non-Teaching Staff. The students are also imparted rigorous practical training.

The Post Graduate course in Electrical – Power Electronics & Drives, offered by the department, focuses on imparting education in the field of Power Electronics, Drives, Application of Power Electronics in Power System, Renewable Energy Sources, Digital Signal Processing etc. It also aims at developing the soft skills of the individual such as report writing and presentation skill by having regular seminars and interactive sessions amongst students and faculty.

Department offers the PhD programme since Jan 2015 started with the establishment of Research Centre. Research in the field of power systems, high voltage engineering, and power electronics is currently ongoing.

The department has eleven well-equipped laboratories viz, Basic Electronics Lab, Power Electronics Lab, Renewable Energy Lab, Project Lab, Electrical Machines Lab, Power System Protection Lab, R&D Lab, Application Software Lab, Drives And Control Lab, Computer Lab (UG and PG)



Basic Electronic Lab



Drives & Control Lab.



Electrical & Computer Lab



Renewable Energy Lab



Power Electronics Lab



PSP Lab



Electrical Project Lab

Electrical Computing Laboratory with state-of-the-art software such as MATLAB, dedicated for Electrical Engineering students to give more insight into the design aspects of various fields of Electrical Engineering with the help of IT tools.

FCRIT Texas Instruments Microcontroller Lab has received various development boards and experimental kits based on the following micro controllers

- General Purpose Micro-Controller: MSP430
- Digital Signal Controller: Piccolo Series (C2000): TMS320F28XX DSP processor

These highly integrated, real-time control microcontrollers provide the ultimate solution for a wide range of low power and portable applications, innovative control solutions for cost-sensitive power electronic applications, with control-optimized performance, control-specialized peripherals, and a control-tuned architecture.

Other laboratories in the department are as follows

- Electrical Measurement and Applied Electronics Lab
- Application Software Lab with ETAP, PSS SINICAL etc.
- Power Electronics Lab.
- Control System Lab.
- Power System Protection.
- Basic Electrical Engineering Lab.

Additional training/workshop/Industrial visit/expert lecture organized for students:

- 1. During vacation period students are motivated to go for internship in industries.*
- 2. Organize industrial visit for students once in a semester*
- 3. Department organizes and conducts technical workshop for students*
- 4. Professional lectures are arranged for all subjects with the help of experts from industries and reputed research organizations.*

Professional Society Activities

Electrical Engineering Student's Association (EESA)

The students of Electrical Engineering Dept. have their own association EESA. The association is a forum for students to come together and share their ideas and skills for all round personality enhancement. It has organized the activities such as Seminars on "Preparation of competitive exams like GRE, GATE etc.", "Profile building for higher studies abroad" and "Education Abroad" by Endeavor, workshop on Electrical Maintenance, Torque 2018: a Techfest and social activity like cleanliness campaign.

IEEE-CRIT students' chapter

The IEEE students' chapter provides learning opportunities within the purview of engineering science, research and technology by organizing seminars, workshops, technical paper competition etc. An intercollegiate technical paper and project competition "TECHPULSE" is organized by the association every year.

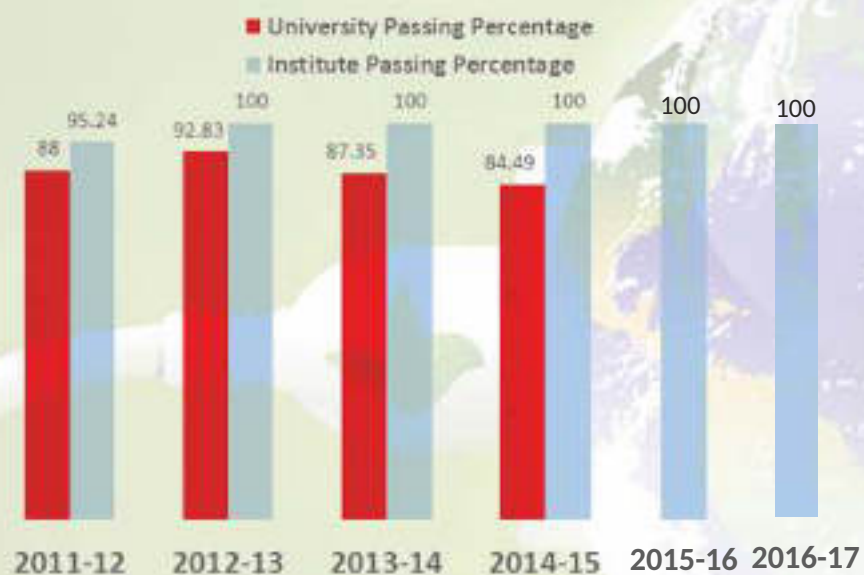
IEI- CRIT students' chapter

The 'Institution of Engineers (India) students' chapter is the largest multi-disciplinary professional society for upcoming engineers. This chapter conducts a variety of technical activities like seminars, industrial visits, group discussions, workshops, mini project competition, quiz competition and expert lectures throughout the year.

Our Achievements: Results, Placement, Staff & Student Technical Papers.

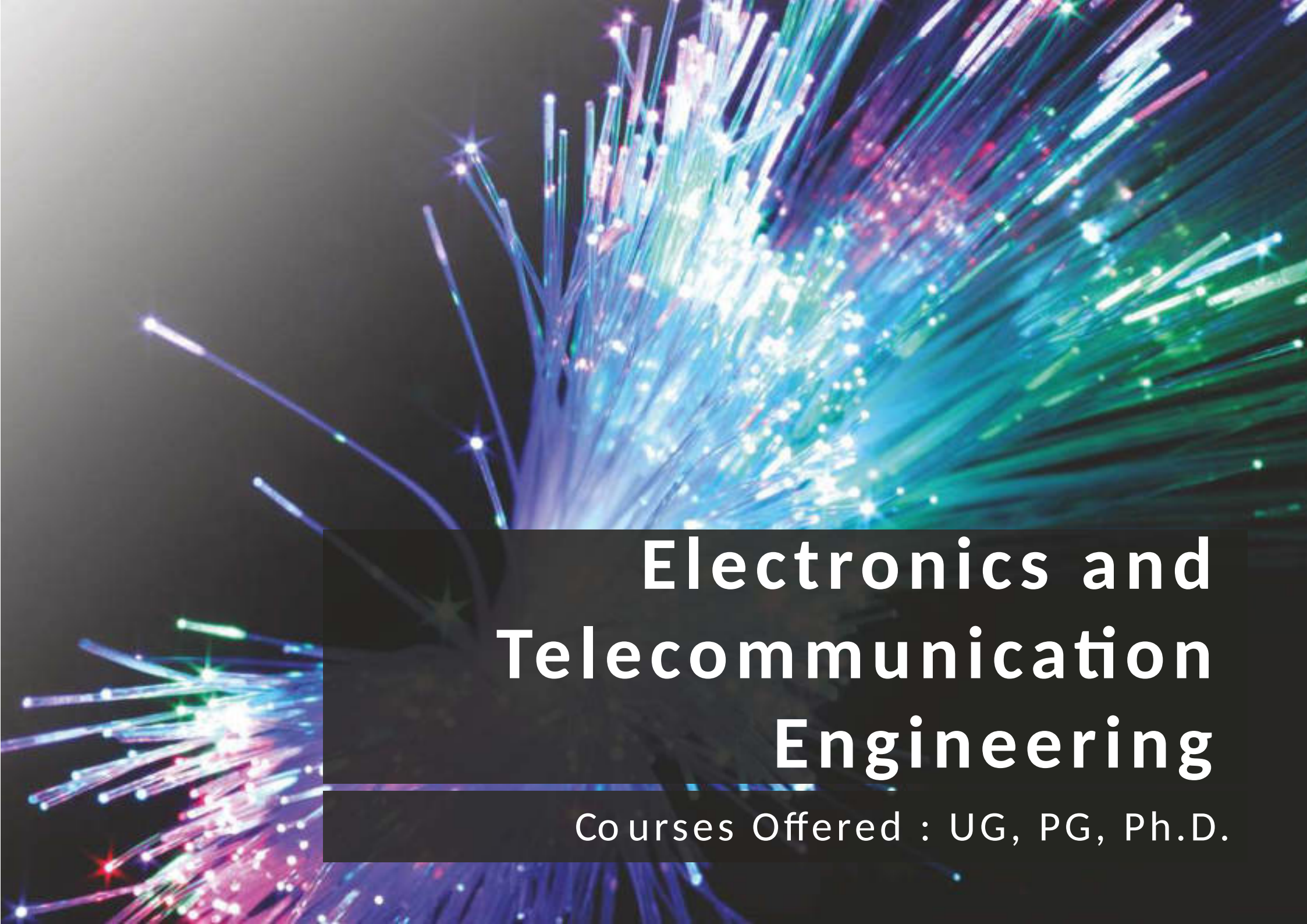
For the past 10 years our students have secured first rank in Mumbai University in addition to many ranks. Also students and faculty are involved in various project sponsored by IEL, Mumbai University etc. Many staff from the department are pursuing Ph.D. and two faculties in the department got POSOCO Power System Award (PPSA) in consecutive years. Department also undertakes consultancy projects from industries.

Result




Concluding Remarks:

We hope the information related to Electrical Engineering Department available in this brochure was useful to the students and parents. Our best wishes to all the students for getting their dream become a reality.



Electronics and Telecommunication Engineering

Courses Offered : UG, PG, Ph.D.



“The ideal engineer is a composite. He is not a scientist, he is not a mathematician, he is not a sociologist or a writer; but he may use the knowledge and techniques of any or all of these disciplines in solving engineering problems”

N. W. Dougherty.

Introduction

Welcome to the Electronics & Telecommunication Engineering Department (EXTC) of Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai. Electronics & telecommunication engineering is one of the largest & fastest growing field of engineering. Having qualified & **trained professionals in this field is the need of the hour. Currently, the department offers :**

1. The Bachelor of Engineering (BE) degree (undergraduate),
2. The Master of Engineering degree (post graduate) (M.E.), and
3. The Ph.D. degree in Electronics & Telecommunication Engineering.

This department was established during the inception of the institute in 1994.

Recognition at National Level

The Bachelor of Electronics & Telecommunication Engineering Programme was first accredited in 2006 and then re-accredited by the **National Board of Accreditation, New Delhi**, for the period of two years w.e.f. 28-08-2012. In the year 2016, the Royal Academy of Engineering, UK awarded GBP 50000, (Rs. 50 Lakhs) for one collaborative research project

Vision *To create professionally competent, research oriented, disciplined, socially and environmentally sensitive electronics and telecommunication engineers.*

Mission

- To achieve academic excellence by imparting quality education and training in science, electronics, and telecommunication engineering fields.
- To create an environment for overall personal development of the students including creative and innovative thinking, team work, professional ethics, and improved communication skills.
- To create awareness among the students about their social and environmental responsibilities to make the world a better place.

UG Program Educational Objectives (PEO's)

Graduates of the program

- Will have successful professional careers at the national and international levels.
- Will be competent and capable of pursuing lifelong learning in technical and allied fields.
- Will behave as responsible citizens of the society.

UG Program Specific Objectives (PSO's)

At the end of the Bachelor of Electronics and Telecommunication Engineering program graduates will be able to:

PSO1: Demonstrate acquired knowledge and skills beyond the curriculum based on departmental level co-curricular and extra-curricular activities under the banner of professional students' forums.

PSO2: Demonstrate skills in writing and presenting technical papers at national and international level conferences / journals.

UG Course Content

The BE program aims at providing a strong foundation in theoretical, practical and design aspects of electronics & telecommunication engineering. The curriculum covers all areas of electronics & telecommunication engineering under the broad categories of basic electronic circuits, electronic devices, analog and digital integrated circuits, microwave devices/engineering, analog and digital communication, microprocessors & microcontrollers, embedded systems, signal processing, fiber optic communication, computer communication network and internet communication engineering. The syllabus comprises of theory and laboratory courses under these categories. Most of the theory courses have a laboratory component, which provides a balanced mix of quality teaching of theoretical concepts and experimental verification of the learnt concepts.

There are laboratory courses aimed at imparting software simulation and hardware design knowledge of various electronic circuits. The projectwork in the syllabus provides opportunities to the students to simulate / develop new electronic / communication system useful for real applications.

Department Strength: Staff, Students & Laboratories

The EXTC department is indeed fortunate to have an excellent team of faculty members, and support staff members who are committed to the cause of quality technical education with patience, hard work, skill and sincerity. Our faculty members are highly qualified and have vast teaching / research / industry experience. Out of present 18 faculty members of the department, 3 are PhD qualified, three are pursuing PhD, and 11 are postgraduates (M.E./M.Tech). Also, students admitted in the first year EXTC belong to good merit rank in the overall entrance examination based merit list.

In the AY 2017-18, the EXTC department has shifted to the newly constructed "Annex" building having 9 spacious laboratories and three classrooms each of 80 sq.m area. All the laboratories are well-equipped to cater to the needs of the University of Mumbai curriculum effectively. The laboratories have state-of-the-art equipment and have latest software like TCAD, Matlab, Scilab etc.

UG and PG Computer lab 1 & 2

The UG Computer lab is equipped with Lenovo S510, Intel Core i3/6100 Processor/4GB DDR4 / 500GB HDD with Windows 10. Total 25 PCs are available in the lab with following software's loaded: Ubuntu 16.4, Scilab 5.5, Octave, Wireshark, Pspice (Student Version), Proteus etc. The PG Computer lab is equipped with Intel Core i3 / 3.10 Ghz CPU with Intel Motherboard. (21 PCs). All the lab PCs are loaded with Matlab 10 and IE3D Software. The laboratories are mainly used for conducting simulation experiments related to the UG as well as PG subjects in the field of telecommunication and signal processing. Final year students also utilize the laboratory for their BE Project work for simulation and analysis of the assigned Matlab / Octave based projects. The laboratories are also used for conducting workshops during the college Tech fest and also during departmental workshops.



Communication Engineering lab 1 & 2

The Communication Laboratory 1 & 2 are well equipped with number of Digital Storage Oscilloscopes (DSO's) from Tektronics/HP, spectrum analyzer, RF and other signal generators function generators, multimeters, and power supplies. It has microwave test benches and various trainer kits for antennas, analog/digital communication, transmission line, and fiber optics. This laboratory is mainly used for conducting experiments related to the second, third, and final year subjects in the field of analog and digital communication, fiber optic communication, and microwave engineering. Final year students also utilize this laboratory for their BE Project work. For the year 2012-13 AICTE, New Delhi, has sanctioned grant worth Rs. Fourteen lac fifteen thousand to this laboratory for purchasing equipment with modern technologies under Modernization and Removal of Obsolescence (MODROB) scheme.

communication Lab.



Electronics Lab

The Electronics Laboratory is mainly utilized for conducting practicals related to the subjects Electronic Devices and Circuits in the Second year of Engineering. Practical for the subject T.V and Video Engineering at TE EXTC are also held in this laboratory. Also, this laboratory is used for testing and implementing analog circuits in Electronics Hardware workshop subject and mini projects during the Second and Third year. The laboratory is well equipped with number of equipments for carrying out various experiments. The list includes: Analog and digital IC Tester, plenty of DSOs. Microcontroller based and regular analog CROs, power supplies with various voltage and current ratings, Function generators, etc.



IC & Microprocessor Laboratory

The IC & Microprocessor Laboratory is mainly utilized for conducting experiments in the field of analog & digital IC and microprocessor/microcontroller for the second & third year engineering students. It has various trainer kits for 8085, 8051, and 80196 series microprocessors/microcontrollers, analog & digital IC tester, DSO's, etc. The laboratory is extensively used for carrying out mini projects related to digital projects in Electronic Hardware Workshop and during project competition organized by the department.



Project Laboratory 1 & 2

In EXTC department we encourage UG students to sincerely carry out their mini-projects and final year projects as they will learn more when they do things themselves. To cater this need we have dedicated two spacious laboratories only for carrying out project work. Located on the third floor of Annex building, these labs are utilized by students of all semesters for testing and prototyping of their projects and research work. Fabrication process for Printed Circuit Boards is also carried out in these laboratories. Both the labs have basic measuring instruments, PCs, internet connection, etc. The students are encouraged to make use of these labs even after college hours and on holidays. Project Lab II houses the department library with over 300 books related to Electronics and Communication engineering. Final year project reports and mini project reports are also available in Project Lab II.



R & D Laboratory

The R & D Laboratory has been set up to begin research work in various Electronics and Communication related fields. The laboratory has made a very modest beginning with an 8051 programmer, 2 desktops, a printer and a net connection. Individual faculty members are pursuing research activities in various fields and the lab facilities required are purchased through the R & D lab and set up in the individual laboratories. The department is currently involved in research activities in the following fields:

- Speech Processing
- Image Processing
- Embedded Systems
- VLSI

The PhD research scholars carry out their research work in the R & D Lab. In the year 2016, the Royal Academy of Engineering, UK awarded GBP 50000, (Rs. 50 Lakhs) for one collaborative research project.



R & D Lab.

Professional Society Activities

All the faculty members of the EXTC department are members of more than one professional bodies like “The Institution of Electronics & Telecommunication Engineers (IETE)”, “Indian Society for Technical Education (ISTE)”, and “IEEE”. Our students are also members of “IETE Student Forum (ISF)”, “Electronics & Telecommunication Students’ Association (ETSA)”, and “IEEE”.

Most of the departmental co-curricular activities including: seminars (MICRO & LOOPS), lecture series by alumni, workshops (organized at department level for 2nd & 3rd year students & institution level during etamax), quiz, mini-project & robotics competitions, etc. (under the banner of Extacy & Oscillations) are organized by the ISF/ETSA student council members under the guidance of staff. These co-curricular activities help students enhance their practical skills & knowledge, makes them think more creatively, and develop skills for working together as a team.

Under the forum of ISF/ETSA, regular industrial visits to Goa, BARC- Mumbai, MEECO Instruments- Navi Mumbai, Air-Mumbai, Doordarshan Kendra - Mumbai, DA-KC-Navi Mumbai, GMRT-Narayangaon, GPTS-Uran, etc. are organized for the students. Also, once in a year all the students go for trekking and enjoy their time with nature.

IEEE Student Chapter of our Institute regularly organizes intercollegiate technical paper & project contests. Students get opportunity to interact with other fields of engineering like Electrical, IT, Computer, etc. through this chapter.

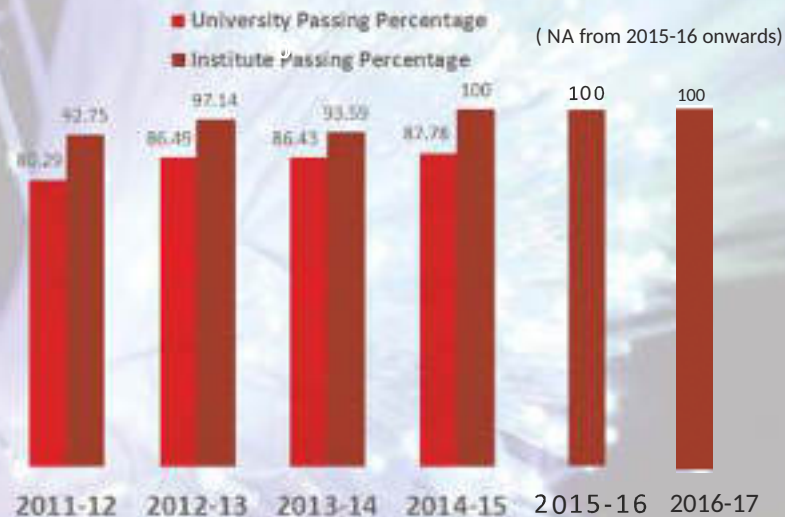
Recently, the Sustainable, Ethical and Environmental development council (SEED) was formed under the Department of Electronics and Telecommunication Engineering. The prime objective of the council is to create awareness among students about the environmental and ethical issues in the society and enlighten them about their responsibility in the eradicating these problems. Various activities pertaining to this are being conducted in the department.

Our Achievements: Results, Placement, Staff & Student Technical Papers.

Our department has been consistently achieving excellent results. The average result of our BE students over the past 20 years is around 95% which is always significantly better than the overall University result. In the past Two decades more than 16 students secured the rank in the top 10 at the University level (including the 1st rank).

The department conducts various training sessions, right from second year level, for preparing the students for placements. In the past few years more than 90% of the eligible students were placed in the top notch companies through campus interviews. Please refer the 'Placement Section' in the brochure for the details. Every year, our faculty members published on an average 12 research papers in the proceedings of the various national/international conferences (organized in India/abroad) and journals. Many senior faculty members are invited by various institutes for delivering guest lectures. In the past, our department has received many grants from AICTE/ISTE for organizing STTP at the national level. For the year 2012-13 AICTE, New Delhi, has approved grant worth Rs. Two lac for conducting National level STTP on "VLSI and Embedded System" in the month of July-2013. In the year 2016, the Royal Academy of Engineering, UK awarded GBP 50000, (Rs. 50 Lakhs) for one collaborative research project.

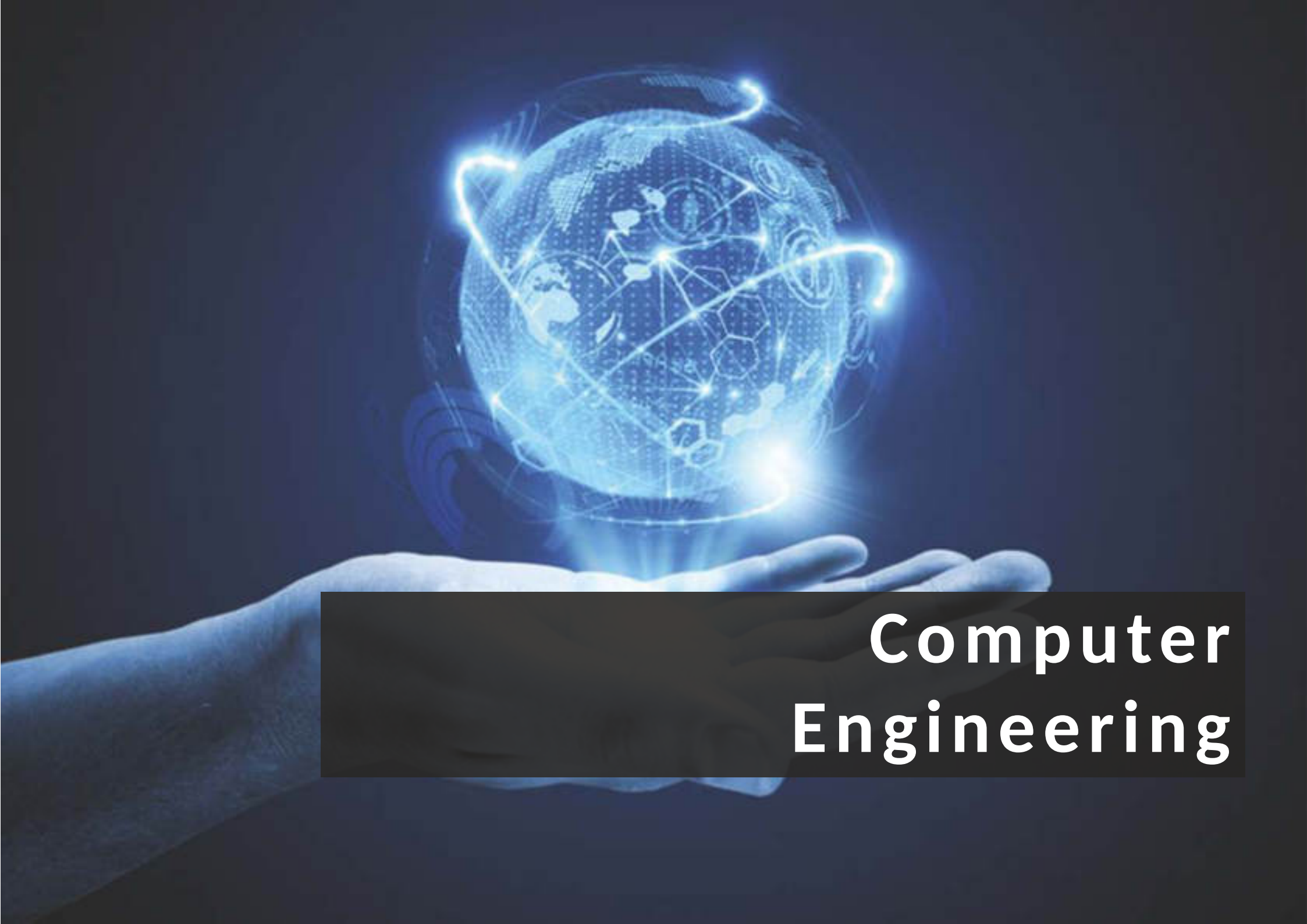
Result



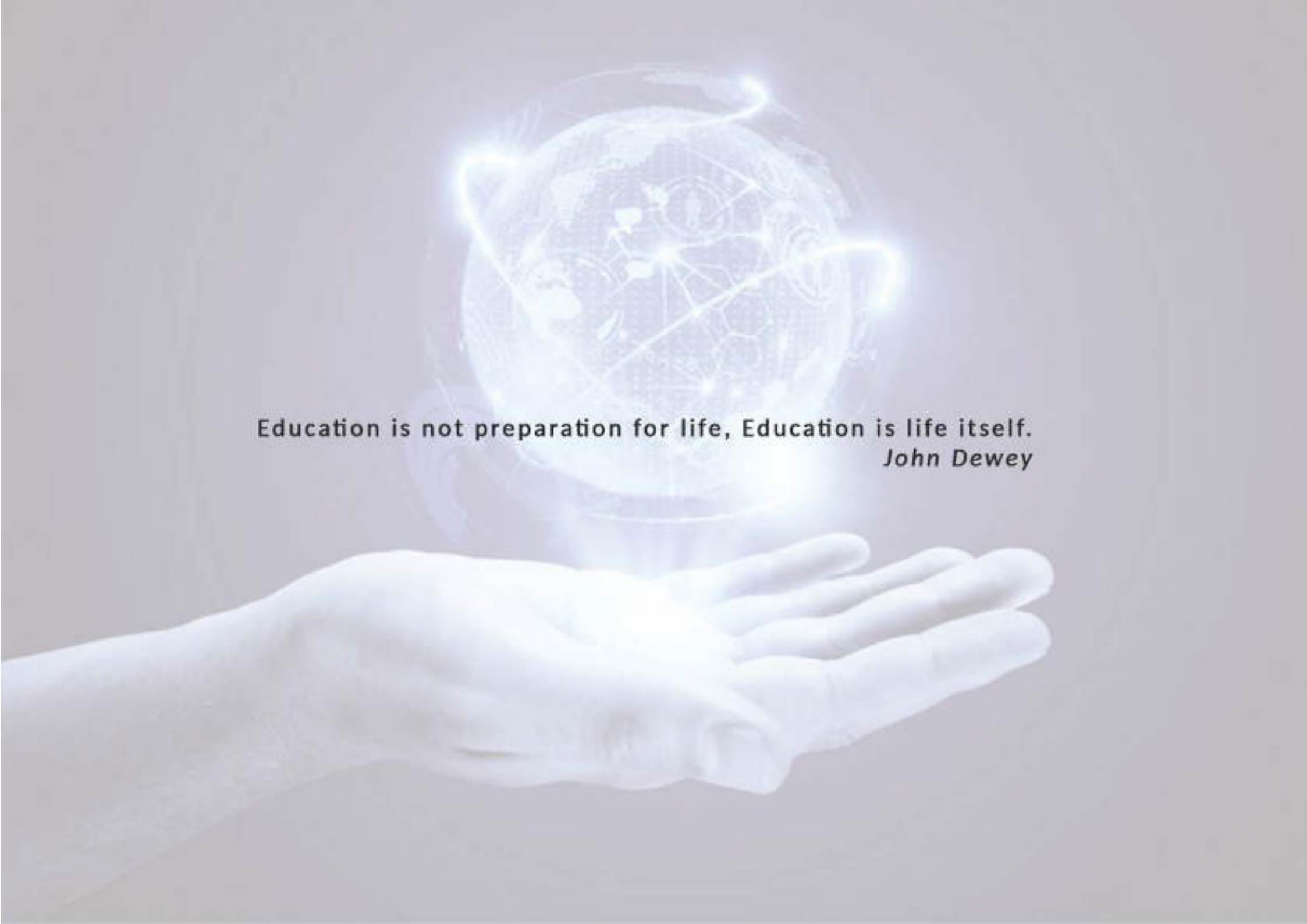
Concluding Remarks:

We hope the information related to EXTC Department available in this brochure was useful to the students and parents. Our best wishes to all the students for getting their dream become a reality.

Happy Engineering! - "Dreams - is not what you see in sleep, is the thing which doesn't let you sleep" by A. P. J. Abdul Kalam.



Computer Engineering

A conceptual image featuring a human hand at the bottom, palm up, holding a glowing, translucent globe. The globe is covered in a complex network of white lines, resembling a globe of connections or a neural network. The background is a soft, light blue gradient.

Education is not preparation for life, Education is life itself.
John Dewey

Introduction

The Department of Computer Engineering at Fr.C.Rodrigues Institute Of Technology, Vashi, was formed in 1994. The department offers a four year course, B.E. in Computer Engineering. The computer department has active research interest in various domains like Artificial Intelligence, Data Mining, Computer Networks and Security, High Performance Computing, etc. It has modern computing amenities equipped with the latest Servers, Desktops; Laptops interconnected by Wired and Wireless LAN with latest tools and technologies. The department has strong collaboration with organizations and leading industries. Our graduates have distinguished themselves in higher studies at the top Universities. They also occupy positions of eminence in the computer industry. Our Alumni remain in constant touch with us and are contributing in the development of the department.

Recognition at National Level

The Bachelor of Computer Engineering Program was accredited for three years from 2006 and reaccredited for two years with effect from 2012 by the National Board of Accreditation (NBA), a body constituted by All India Council for Technical Education (AICTE), New Delhi.

Our Vision : To contribute significantly towards industry and research oriented technical education leading to self-sustainable professionals and responsible citizens

Mission

- To prepare learners to excel in professional career and higher education.
- To encourage learners to use modern tools and techniques effectively for solving real life problems.
- To inculcate professional and leadership qualities and adapt to current trends by engaging in life-long learning.

UG Program Educational Objectives (PEO's)

- To provide quality and application oriented education to meet the industry requirements.
- To prepare technically competent, ethically and socially committed professionals with good leadership qualities.
- To facilitate an opportunity to interact with prominent institutes, alumni and industries to understand the emerging trends in computer technology

UG PSO's Program Specific Objectives

- To comprehend, analyze and develop solutions for real life problems.
- To apply standard practices and strategies using appropriate research skills, modern tools and techniques to develop computer based solutions

UG Course Content

Computer Engineering course offered introduces the student to the world of programming starting with the basics and slowly leading towards the high end programming technologies. The curriculum is prescribed by the University of Mumbai. Department follows the outcome based education model. In addition, Choice Based Credit and Grading System is also introduced from the academic year 2016-17 through optional courses at department and institute level to ensure quality of engineering education. The department is committed to help the student explore the field of Computer engineering within and beyond the syllabus through Classroom teaching, Practical sessions, Guest lectures, Seminars, Workshops by eminent scholars / professionals in the field etc. The Subjects offered under Computer Engineering department are broadly categorized under Basic Electronics, Data Science, System Integration and Architecture, Computer Networks and Security, Web Technology, Software Engineering, Artificial Intelligence and Machine Learning. Some of the courses focus exclusively on practical based learning.

Department Strength: Staff, Students & Laboratories

Computer engineering department is having a highly dedicated team of faculty members and supporting staff with a strong passion for furthering the cause of teaching and research. They have outstanding research contribution in their own fields of specialization. They take a sympathetic interest in the progress and development of each of his or her students; also keep accurate records of academic details of each student in his or her classes. The Department has 13 highly qualified, experienced and dedicated faculty members. Faculty members act as mentors for a group of students; they can approach their mentors to share their academic and personal matters.

Students admitted are also highly motivational; they attend lectures and practicals regularly, complete the assignment works and projects within the stipulated time, students actively take part in extracurricular and co-curricular activities. The Department has modern computing amenities equipped with the highly configured computers interconnected by high speed LAN with latest tools and technologies. The Department has eight computer laboratories.

The student faculty ratio of Computer Engineering Department is around 1:15. Department faculty members are specialized in various areas like software development, web development, networking and security, machine learning and deep learning etc. many of the application softwares used in the Institute are developed by our faculty members.

The department has eight well-equipped laboratories to cater to the needs of the University of Mumbai curriculum effectively. All these laboratories are equipped with the highly configured 20 to 25 computers and are interconnected by high speed LAN.



Internal Combustion Engine Lab.



Computing Lab



Database Lab



Network & Security Lab



Open Source Computer Lab



System Lab

Professional Society Activities



Open Source Computer Lab

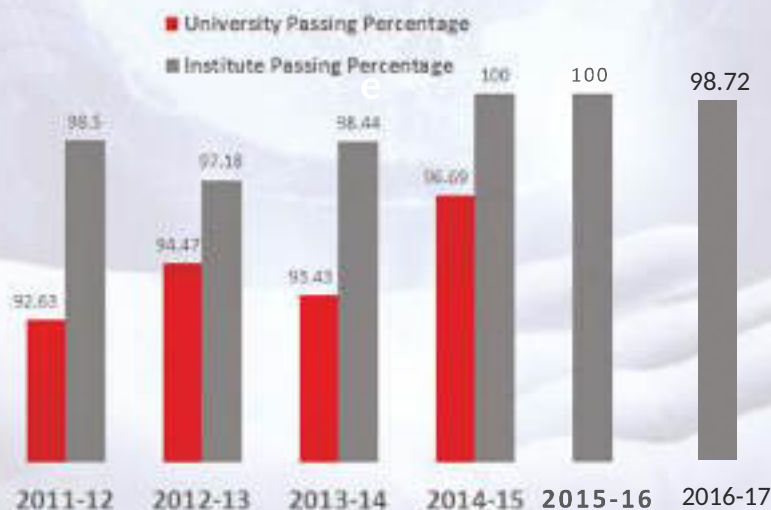
Department of Computer Engineering has been conducting various seminars as part of Professional Society activities under CSI (Computer Society of India Student Chapter) and also conducts many workshops. All the faculty members and students take active part in organizing the events. Eminent scholars / professionals are invited to speak on nescient topics in computer science. The topics so far discussed are Role of Technology in Environmental issues, Project Management and Finance, Professional Ethics, Impact of IT solutions on Societal and Environment context, Cyber Security, Competitive Exams and Higher Studies, Entrepreneurship, Cyber Crime Investigation, Computer forensics. Workshops on Machine Learning, Android App Development, Python, Web Designing, Core Java, Arduinoand Coding & Gaming were conducted. Apart from this regular industrial visitsare organized. Also once in a year all students go for trekking and enjoy their time.

Our Achievements: Results, Placement, Staff & Student Technical Papers.

Students implement research oriented, real-time projects in the final year as part of their curriculum which trains them to be highly competent computer software professionals needed by the industries. These projects are guided by department faculty. During the curriculum, the department provides a platform for students to present/publish technical papers in National and International Conferences/Journals. Our faculty members and students have published research papers in the proceedings of various National/International Conferences and International Journals. Faculty are involved in the maintenance of in-house projects like Library Management System, Merit List Generation, Store Management Package, Website Development for the Institute & Computerization of Mark sheets and Leaving Certificates for all the departments at Institute Level.

The department is in the process of collaboration with various Industries. Few projects have been already recognized for deployment in the industries like Taste IT Solution, Cyber Cell of Navi Mumbai Police and Google.

Result




Concluding Remarks:

Our strategic plan is replete with ambition, optimism, and confidence in an institution that is prepared to take the next great step forward. The plan is dedicated to continuous improvement of quality. We will achieve our goals and reach our vision.

“Dream Becomes a goal when action is taken towards its achievement” Bo Benett



Information Technology



An investment in knowledge pays the best interest.
Benjamin Franklin

Introduction

The four year Information Technology Degree Course was started in the year 2001. The present intake of students is 60. The course includes Programming Techniques and Basic Sciences at first year level. In second and third year the course includes basic and core Information Technology subjects and subjects like Data structure and Algorithms analysis, Database management system, Advance DBMS, operating System, Computer Graphics and Virtual Reality , etc.

Recognition at National Level

The Bachelor of information Technology Engineering programme is accredited for the period of two years w.e.f. 28-08-2012 by the National Board of Accreditation, New Delhi.

Our Vision : To become a leading center of excellence for quality education, advance research and development in the field of Information Technology for self-sustaining professionals.

Mission

- To provide industry oriented quality education and training to students related to cutting edge technologies in the field of information technology.
- To promote multi disciplinary activities that inspires students to serve society through innovative applications.
- To promote entrepreneurship skills in students with overall personality development.

UG Program Educational Objectives (PEO's)

- PEO1. Graduates will be able to develop research attitude and have fundamental knowledge to excel in higher education and life-long learning skills in the context of technological change.
- PEO2. Graduates will be able to successfully sustain in industry, grow and excel in their professional career.
- PEO3. Graduates will be able to communicate and demonstrate collaborative, entrepreneurial, leadership and ethical skills to develop solutions for societal issues.

UG Program Specific Objectives (PSO's)

- PSO1: Apply knowledge of mathematics, Science and Information technology to define, analyze, build, test and integrate subsystems to provide solution of real life problems.
- PSO2: Develop self-learning and research attitude to offer IT services for sustaining as excellent professional or entrepreneur along with ethics and leadership skills.

UG Course Content

The course includes basic and core Information Technology subjects and subjects like OOPM, DSA, DBMS, DS, AIT, DMBI Computer Graphics and Virtual Reality , etc.

The advanced topics such as Data Warehousing Mining and Business Intelligence, Digital Signal and Image Processing Computer Simulation and Modeling, Software Testing and Quality Assurance, Information Storage Management and Disaster Recovery , Software Project Management are included as compulsory subjects in the final year. Wireless Networks, Multimedia Systems, Evolutionary Algorithms, IT in Construction, Nanotechnology, Geographical Information Systems, Artificial Intelligence, Cloud Computing, Big data analytics, IT for health care, Service Oriented Architecture , E-Government, ERP & CRM , Mobile and E-Commerce, Robotics and Machine Intelligence are the various electives offered in the final year.

Department Strength: Staff, Students & Laboratories

The IT Department is indeed fortunate to have an excellent team of 14 faculty members, and 3 support staff members and 1 system administrator who are committed to the cause of quality technical education with patience, hard work, skill and sincerity. Our faculty members are highly qualified and have vast teaching / research / industry experience.

The department has 7 well equipped laboratories and 3 classroom to cater to the needs of the University of Mumbai curriculum effectively . All these laboratories have software like SQL server 2008 R2, Visual Studio 2010, Scilab for simulation. Prolog etc.

Laboratories: Various domain laboratories are the real strength of Information Technology department and serves as motivation for student's in teaching learning process. The centralized computing facility and services can be made available as all machines are connected to server.

1. Automation Lab -20 Desktops
2. Open Source Lab- 25 Laptops
3. Cloud Computing Lab-20 Laptops
4. Data Science Lab-25 Laptops
5. Security Lab-20 Desktops
6. Networking Lab-25 Laptops
7. Project/R&D Lab -05 Laptops
8. Staff Room-11 Desktops, 4 Laptops.



Automation Lab



Networking Lab



Cloud Computing Lab



Data Science Lab



Open Source Lab



Security Lab

Professional Society Activities

Computer Society of India (CSI)

The Computer Society of India (CSI) started students' chapter at FCRIIT in the year 2001 .The objective is to inculcate in students a professional attitude with effective organization and communication skills. From the second year, IT students are a part of this society and conduct various events which hone their teamwork skills. Agnel Information Technology Students Symposium (AITSS) is conducted every odd semester and the event INFOBITS in which students organize seminars , workshops and contests is conducted every even semester. Experts from various industries are invited for delivering lectures in these events. Industrial visits to Goa are also arranged every year.

Events organized in 2016:

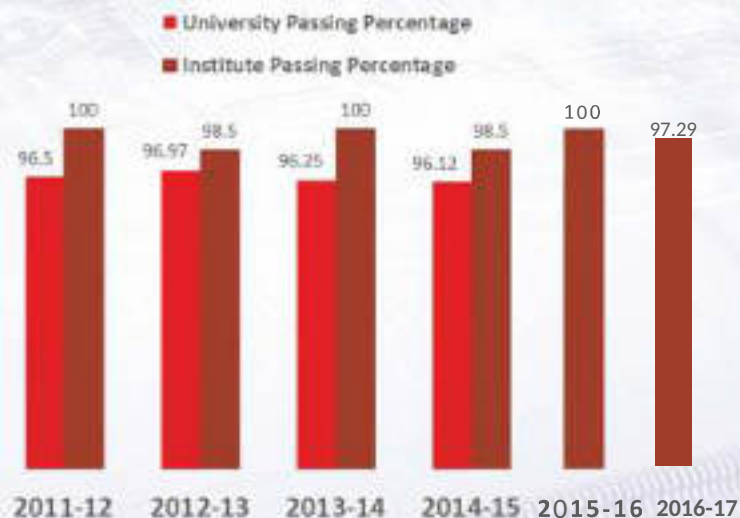
Department of Information technology organised seminars,workshops,contests, paper presentation on advance topics in IT under CSI-INFOBITS and CSI-AITSS.

- STTP on “Cross Platform Mobile Application Development and IoT” in association with ATS Learning Solutions from 7th May – 11th May 2018.
- Three days' hands on workshop on “Networking with Linux” from 17th, 18th and 20th April 2018.
- CPMA, IoT and Robotics workshops for 213 students have been conducted in association with ATS Learning Solutions from 21st December 2017 to 4th March 2018 in six successive batches.
- Seminar on “Recommendation System” by Asheshkumar Singh from TCS on 23rd February 2018.
- Workshop on “Data Science” by Sujit Mishra from Grid analytics on 28th July 2017.

Our Achievements: Results, Placement, Staff & Student Technical Papers.

In the past four years, our faculty members have published more than 85 research papers in the proceedings of the various National/International Conferences and International Journals. Faculty are involved in various R&D projects and in the development and maintenance of in-house projects like First year Admission package and Exam Cell Automation. Also students published papers in National, International Conferences & Journals, Staff DB, Attendance Management, Library Management. Five groups of students participated and won in national and zonal level Competition / Hackathons.

Result



Concluding Remarks:

We hope that the information provided in this brochure related to IT department was useful to the students and parents. We would like to extend our best wishes to all the students for their future endeavour.



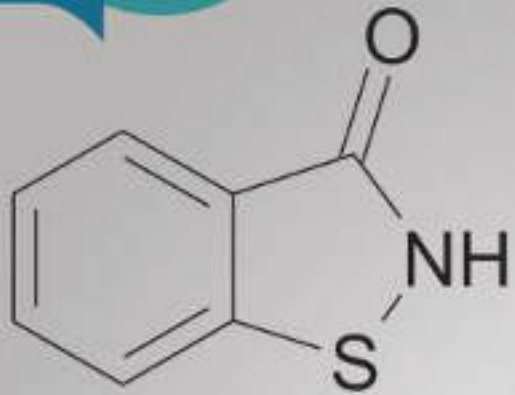
Engineer

design
product
process
solutions
inventions
structure
business
software
use
work
nature

like
creation
question
write
district
distinctions

system
process
man
design
problems
object
world
time
degree
technology
solve
missing
think
fact
skyscraper
due
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terms
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hands
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general
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social
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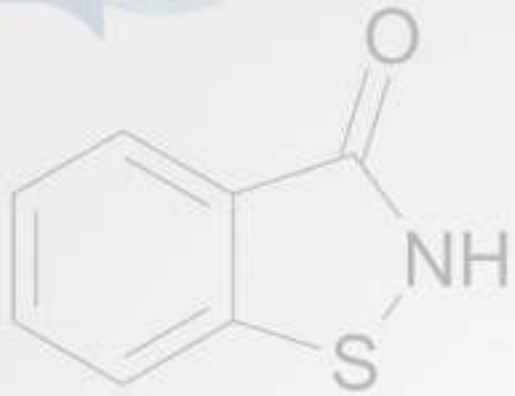
one
many
need
buildings
solutions
technicians
view



$$KE = \frac{1}{2}mv^2$$



Humanities Department



$$KE = \frac{1}{2}mv^2$$

An education isn't how much you have committed to memory, or even how much you know. It's being able to differentiate between what you know and what you don't.

Anatole France

Introduction

The Department of Basic Sciences and Humanities, which comprises of well qualified and dedicated faculty for courses in Applied Mathematics, Applied Physics, Applied Chemistry and Communication Skills, is responsible for orienting all first year students towards a successful academic career. Apart from teaching the above mentioned courses and some second year courses, which form the basis for all branches of Engineering, this department also familiarises the entrants with the philosophy of our organization and the value based approach to education that has earned this college its distinctive reputation.

Applied physics and Applied Chemistry Laboratory

The Applied Sciences Laboratory is well lit, spacious and well equipped. Here the First Year Students fortify their knowledge in the Basic Sciences of Physics and Chemistry.

The department promotes R&D work in the multi-disciplinary field of Nano Technology, for which it has set up a CVD furnace for the synthesis of Carbon nanotubes.



Students performing Chemistry Experiments



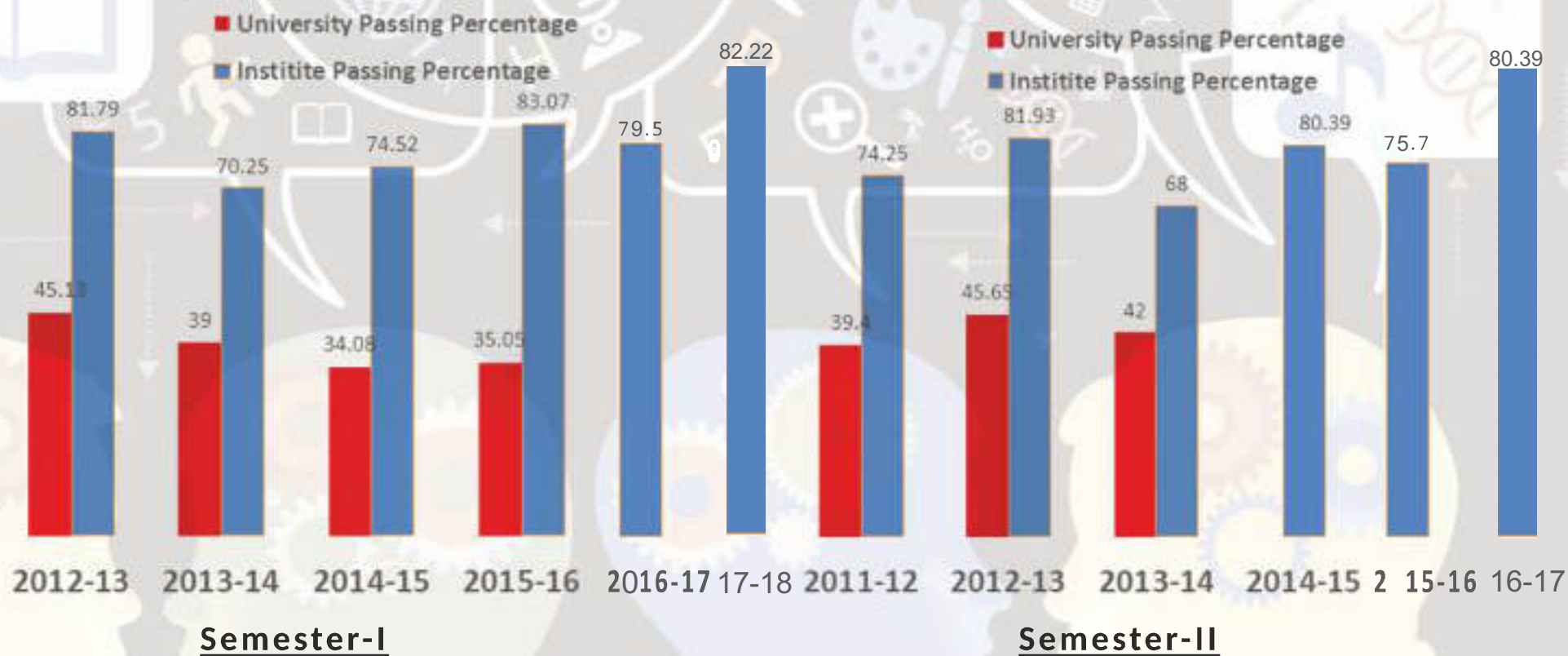
Students performing Physics Experiments

Basic Sciences and Humanities Students Development Forum

Genesis:

'Genesis' is a platform managed by the Department of Basic Sciences and Humanities for the overall development of personality of the students. Events such as Debates, Elocutions, Quiz, Extempore, Street Plays and Word Games open to all students are conducted by the Genesis Council, generally comprising of second year students. Programs conducted under this banner are especially beneficial to the first year students as it helps to bring out their hidden talents and exposes them to various activities helping in the overall development of the students personality. It also taps into the students organising skills and leadership qualities.

Results



FCRIT Placement Cell

THE PLACEMENT CELL

Fr. C.R.I.T. Vashi has proved to be one of the preferred destinations for aspiring technologists from across the country. The institute consistently attracts the finest faculty and the best of students for its Bachelors and Masters Programs. It has a rich tradition of pursuing excellence and has continually re-invented itself in terms of academic programs and research infrastructure. The presence of good research facilities, institute industry collaborations and industrial training opportunities help the students to excel and be ahead in the competitive professional environment.

We highly value our partnership with recruiters, alumni and friends of Fr. C.R.I.T. and remain committed to making the recruiting experience productive and positive. We invite recruiting organizations and graduation students to find the best match between their need and student capabilities.

The Placement Cell is responsible for providing an Industry -Institute interface and aims at placing the eligible students according to their aptitude. In the current academic year 2016-17, we are approaching towards 100% placement for our eligible students. The average salary offered this year was Rs.3.5 lacs per annum whereas the highest was Rs.5.5 lacs per annum. Even though industrial training is not part of our curriculum, we arranged for short term training programs in some of the reputed industries during their summer and winter break. This helped our pre-final year students to explore an industrial environment putting their theoretical knowledge into practice. Some of our recruiters are given on the back side of front cover.



Contact :

Mr. Ravi Gopalakrishnan Iyer

- Training Placement Officer

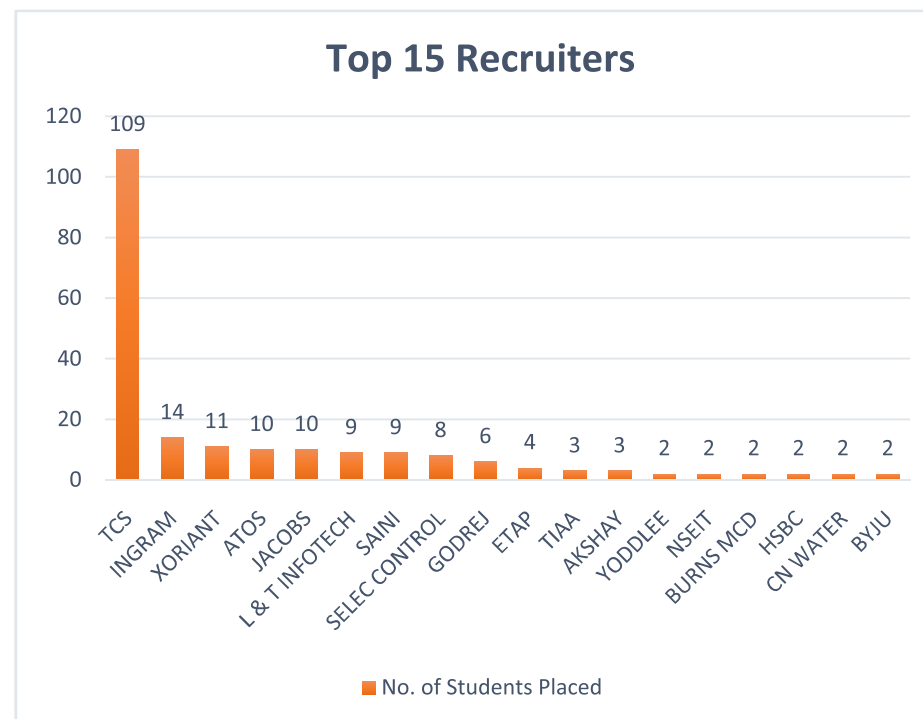
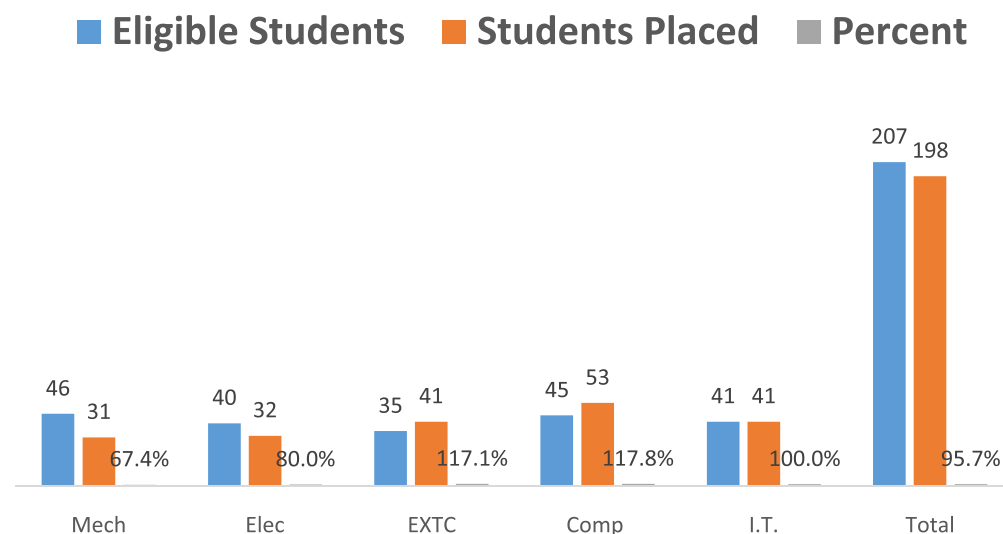
Mobile No :+91 9833010939

Phone: 022-27771000 (Ext.106),

E-mail : ravi.gopalakrishnan@fcrit.ac.in

Placement Summary

Placement Statistics 2017-18 (still going on)

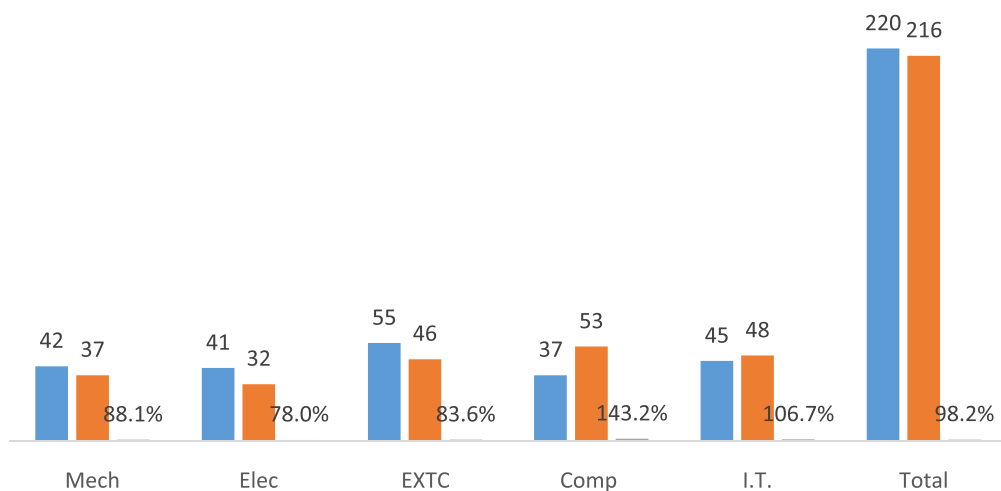


[file:///C:/Users/Administrator/Downloads/2018 PLACEMENT DRIVES/Brochure with updated 2017-18 figureswithpercentage.docx](file:///C:/Users/Administrator/Downloads/2018%20PLACEMENT%20DRIVES/Brochure%20with%20updated%202017-18%20figureswithpercentage.docx)

Salary Details	Computer	EXTC	I.T.	Mechanical	Electrical
Max. Salary (Lakhs/annum)	7	4.5	7	5	5
Avg. Salary (Lakhs/annum)	3.54	3.43	3.52	3.33	3.38

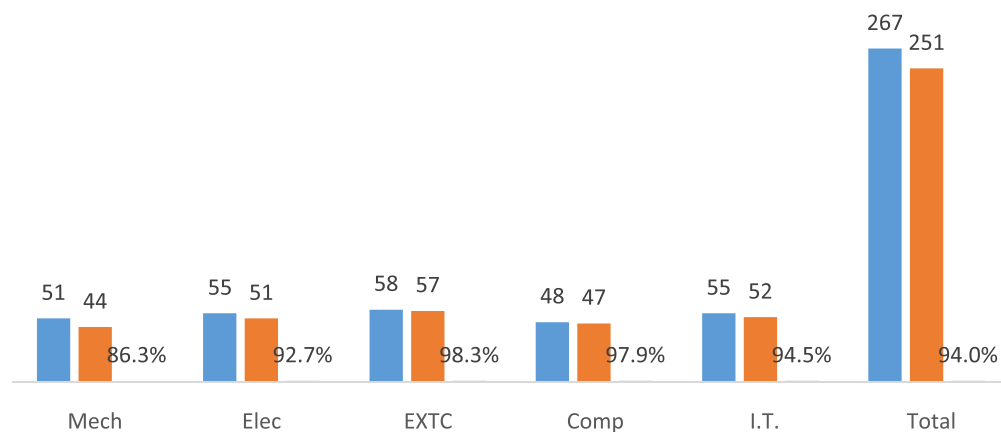
Placement Statistics 2016-17

■ Eligible Students ■ Students Placed ■ Percent

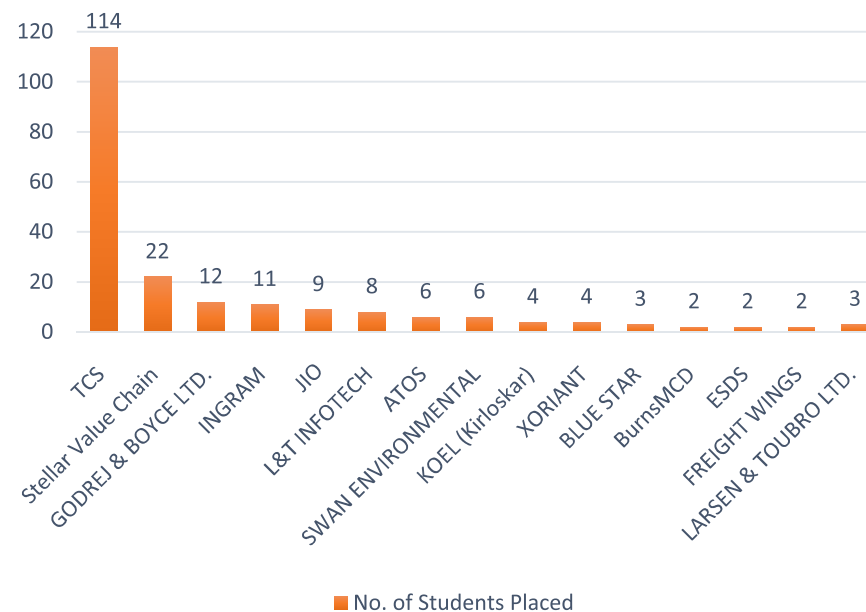


Placement Statistics 2015-16

■ Eligible Students ■ Students Placed ■ percent

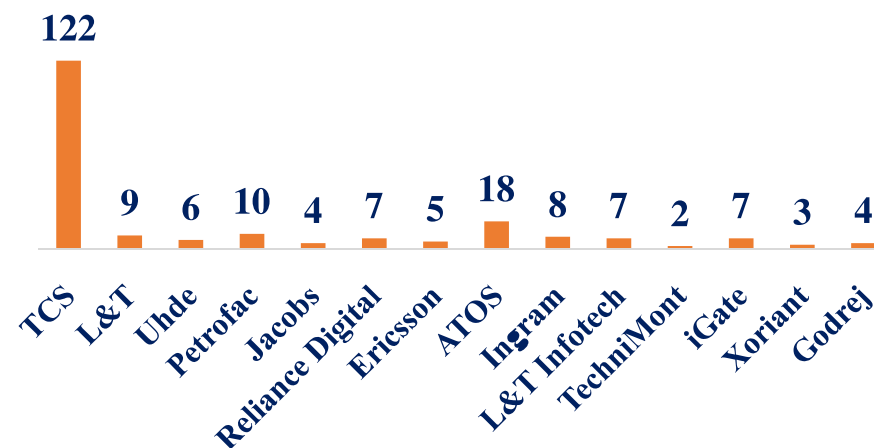


Top 15 Recruiters



Top 15 Recruiters

■ No. of Students Placed



Special Achievements

The brief history of Fr. CRIT has seen students excelling in academics as well as making a promising entry into the vast field of engineering and industry. Among the students who have graduated from the institute, many have earned accolades for themselves as well as for the institute at the University level. Following students have made the Institute proud by achieving ranks in the past years.

Sr.No	Name	Branch / Course	University Ran	Year
1	Amit Kumar Yadav	Electrical	1st	2015
2	Dhanashri Sadaye	Electrical	2nd	2015
3	Rajul Chopde	EXTC	3rd	2015
4	Suraj Ponnaganti	Mechanical	4th	2015
5	Narayanan Ramakrishn	Computer	5th	2015
6	Ravindra Kachare	Electrical	5th	2015
7	Rushikesh Shete	Computer	6th	2015
8	Pratik Chavan	Mechanical	6th	2015
9	Tarun Chavan	Mechanical	8th	2015
10	Prajakta Patil	Electrical	8th	2015
11	Arshad Danish	Mechanical	1st	2014
12	Setupriya Menon	Electrical	1st	2014
13	Aditya Talawadekar	Electrical	4th	2014
14	Chinmay Vaidya	Electrical	5th	2014
15	Angela George	Electrical	10th	2014
16	Aamir Khan	Mechanical	1st	2013
17	Aarti Gurav	Electrical	3rd	2013
18	Kalpna Rajput	Electrical	4th	2013
19	Apurva Rane	Electrical	5th	2013
20	Shruti Sawant	Computer	5th	2013
21	Lasyaveni Konduri	Electrical	7th	2013
22	Bhumika Chhaya	Electrical	9th	2013
23	Thomas Sibin George	Electrical	1st	2012
24	Lahoti Aniket Ashok	Electrical	2nd	2012
25	Godbole Sangeeta Shri	Electrical	3rd	2012
26	Pal Sushmit Satya	Electrical	4th	2012
27	Pandey Vasundhara	Electrical	5th	2012
28	Vinayak Patil	Mechanical	7th	2012
29	Ms. Shilpa Dash	EXTC	9th	2012
30	Ms. Mathangi R.	IT	4th	2012
31	Ms. Drushti Bhagat	IT	6th	2012

After the introduction of the Credit based grading system, the University has stopped publishing the list of the rank holders.

Central Facilities

The Central Library is the heart of this institution and is aimed at providing an appropriate learning and research environment which can make possible excellence in teaching and timely response to the learning and information needs of students. The Central Library acquires, collects, develops, stores and disseminates library resources and helps the users in their academic and extra-curricular activities. It is the first library in Navi Mumbai to have Automated Library Resources Management System. It is located at the centre of the main building of Agnel Technical Education Complex occupying an area of 750 sq. mtr. divided into two floors. A separate resource centre is located on the fourth floor. This location of the Library provides easy as well as speedy access to the library services rendered for the users which includes our Alumni and Visiting Faculty. The Library takes care of its users by providing them different types of facilities and services. The reference section comprises Books section,

Periodicals section, Project report section, Newspaper section and Indian Standards section with a system of open access which can be used by 150 students at a time. Services of the Library includes : Keeping library resources for reference as well as for home lending, Reading halls, Language laboratory, Multimedia facilities, Photocopying, Inter-library loan and Referral Services.

Assets of the Central Library:

We have a state-of-the-art collection of print as well as non-print resources that includes: books over 33000 Volumes, 132 National and International Journals, 1273 Bound Volumes of Journals along with Non-Print media CD-ROMs, DVDs, Floppies, Conferences & Seminars proceedings, Synopsis and Project Reports. The Library is a hub of academic activities and remains open for 15 hrs. a day. It has embarked, in a planned manner on the path of its growth, development and modernization in the areas of internet, digitalization, resources sharing, website development, online library services, library staff training & development and library infrastructure development.



Mentoring Cell

A professional Counsellor is available in the campus for mentoring the students and motivating them. Career counsellors also visit the Campus twice a week for professional career counselling. The Mentoring cell is setup in the Old building on the Ground Floor.

Central Facilities

EXTRA CURRICULAR & CO CURRICULAR ACTIVITIES

We at Fr. Agnells are committed to our objective of making our students fit in the overall growth of their personality with strong character. For this purpose, the management of Fr. C.R.I.T. continuously strives to provide to the students the best in terms of Academic, moral, spiritual spheres along with practical adroitness and professional effectiveness. In keeping with the maxim "mens sana in corpore sana" (A healthy mind in a healthy body), students are also provided with exceptionally good facilities for health care, physical fitness, exercise and various disciplines of sports. To this end, within the campus there is a high standard Multi Gym where apart from adequate equipment and machines for variety of physical fitness exercises, including the health care steam bath, heat treatment, weight lifting and yoga, there are special sections providing facilities for table tennis, carrom, and chess. An adequately large area with wooden parquet flooring is provided for aerobic exercises to the beat of rhythmic music. For the outdoor sports facilities, the campus has international sized, well maintained open air courts and grounds. These grounds cover a total area of about seven and a half acres of land and are used for football, hockey, volleyball and basketball. In the open grounds, occasionally running tracks are demarcated for athletes, including the facilities for high jump, long jump, discus throw, javelin throw and shot put etc., Availing of these excellent facilities, our football as well as basketball teams have many a time reached the semifinals and finals in the Annual Inter-collegiate tournaments of Mumbai University.

The prime attraction of the open air sports facilities available in the wide spread campus are the Basketball courts. These twin courts have their surface treated with special concrete technology. They are floodlit, enabling them to be used for practice and matches to be held even in the late evening. These courts have been adjudged by the All India Basketball Federation, as among the best open air courts available in the whole of India.

The sporting needs of the entire Complex is met by the Fr. Agnel Gymkhana vide its various facilities available to all the students of the Complex in FOOTBALL, BASKETBALL, VOLLEYBALL, HANDBALL, HOCKEY, BADMINTON, CHESS, ATHLETICS, GYMNASTICS, KABBADI, KHO-KHO.

Badminton Court



Agnel Badminton Academy has been set up on the 7th floor of the Annex building with 4 badminton courts. These courts are of international standards with imported European flooring and Japanese lighting as approved by Badminton World Federation (BWF). On designated days and time, these courts are open to all and can be pre-booked for play on the portal. The coaching - Agnel Badminton Academy has tied up with Badminton Gurukul, which is an initiative of renowned coach **Shri Pullela Gopichand**.

Central Facilities

AGNEL SWIMMING POOL & GYMNASIUM

To underline Agnells commitment to the all round development of the students a state of the art swimming pool was inaugurated in 2010. A Shooting Range for budding marksmen and a world class Astro-turf ground for Hockey and Football is also available at our sports complex. A multi utility high tech gymnasium has been set up to promote physical fitness among our students. The facility boasts of state-of-the-art equipment for a full body work out after which sauna is available. A professional trainer guides the students in the right direction to make sure they use the arrangements to their maximum benefits. Aerobics with fast pulsating music sets the mood for the evening.

MEDICAL CENTRE

A campus with a large population certainly calls for self sufficiency in all spheres including medical facilities. With this philosophy in mind a Medical Centre has been created in the campus with facilities for first aid, pathology, radiology in-patient arrangements and a panel of Consulting Doctors from various specializations. The unique feature of this Medical Centre is the future plan for extending these facilities to the poor and needy at a very nominal and concessional rate as an expression of commitment towards charitable acts.



Central Facilities

MEDITATION CENTRE

Need a place to close your eyes and find your true self and connect with your spiritual side? Visit the "Meditation Centre". It is located on the ground floor of Balbhavan. It has an area of 1570 sq. feet with centralized air conditioning and the right ambience for meditation and prayer meets. It has a state-of-the-art surround sound system with a processor capable of storing up to 200 thousand bhajans and spiritual songs which the users can select and play through a modern computer as per their taste.

CENTRAL CAFETERIA

The spacious canteen caters not only to the hostelites and Balbhavan students but also to the non-residential students and staff of the entire complex. The choice of food ranges from snacks to a Thali of Indian or Chinese Cuisine. Chilled soft-drinks and ice-cream help beat the heat.



HOSTEL AND WELFARE FACILITIES

Boys Hostel:

One three-storied block consists of 33 rooms, each accommodating three boys. The rooms are well furnished with a bed, a table and chair, a cupboard and a fan for each hostelite. There is a recreation room consisting of a TV, TT table and a carrom board. There are three guests rooms for visiting parents.

Girls Hostel:

The girl's hostel is located on the 2nd & 3rd floor of the block for faculty quarters. Girls hostel comprises of 06 well furnished apartments with a capacity of 96 students.

Staff Quarters:

Two separate towers have been built for housing staff. They consist of different categories of flats designed specially for the core staff members at various levels. The flats are designed with great emphasis on natural lighting and ventilation.



Members of Governing Council

Rev. Fr. Saturino Almeida

Chairman of the Society / Trust, Managing Director,
Agnel Technical Education Complex, Vashi, Navi Mumbai.

Dr. Mohanbhai Patel

Member, Industrialist

Rev. (Dr.) Ivon D'Almeida

Member, Asst. Director, Agnel Technical Education Complex,
Vashi, Navi Mumbai.

Rev. Fr. Valerian D' Souza

Member, Director of Agnel Technical Education Complex
Trustee of the society/ Trust, Bandra.

Prof (Dr.) R.K. Shevgaonkar,

Member, IIT Bombay, Former Vice Chancellor of University of Pune
Former Director of IIT Delhi.

Prof. (Dr.) B.B. Ahuja

Member, Director of College of Engg., Pune

Mr. Vishal Mehrotra

Member, Global Head Open Source TCS

Dr. B.A. Metri

Member, Dean/Director L&T Project Management Institute, Vadodara.

Dr. Srija Unnikrishnan

Member, Principal, FCRIT, Bandra, Mumbai.

Dr. A.G. Kothari

Member, AICTE Nominee, Visvesraya College of Engg., Nagpur.

Prof. Ramanath Gavankar

Member, Nominee of University of Mumbai.

Dr. S.k. Mahajan

Member, Director of Technical Education, Maharashtra State.

Dr. S. M. Khot

Member, Principal, FCRIT, Vashi, Navi Mumbai.

Dr. Milind Shah

Member, Professor & HOD, EXTC.

Mrs Laxmi G.

Member, Associate Professor, IT Department.

RAGGING UNDERTAKING

If any student is found ragging in the college campus or any victim of ragging complains to the college management / authorities, FIR will be lodged against that particular student and he / she shall be liable to be rusticated from the college. This is to be done without fail so that the Management of the College may not be found directly or indirectly indulging in the contempt of the Supreme Court decision vide Supreme Court of India order May 2007 Item No. 33 Court No. 4 Section XIA.

Place: _____
(Signature of the Parent / Guardian)

Date: _____
(Signature of the Candidate)

RAGGING ANNEXURE I AFFIDAVIT BY THE STUDENT

1. I, Ms. /Mr. _____(full Name of the student with admission / registration /enrolment number)s/o d/o Mr. / Mrs. / Ms. _____, having been admitted to _____ (Name of the Institution)_____ have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the “Regulations”) carefully read and fully understood the provisions contained in the said Regulations.

2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.

3. I have also, in particular, perused clause 7 and 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against me in case I am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

4. I hereby solemnly aver and undertake that

- a) I will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
- b) I will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.

5. I hereby affirm that, if found guilty of ragging, I am liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against me under any penal law or any law for the time being in force.

6. I hereby declare that I have not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, I am aware that my admission is liable to be cancelled.

Declared this ____ day of _____ month of _____ year.

Signature of deponent
Name :

RAGGING ANNEXURE II

AFFIDAVIT BY THE PARENT / GUARDIAN

1. I, Mr. / Mrs. /Ms _____ (full Name of the parent/ guardian) father / mother / guardian of _____(full Name of the student with admission / registration /enrolment number) , having been admitted to Name of the Institution) _____, have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (herein after called the “Regulations”) carefully read and fully understood the provisions contained in the said Regulations.

2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.

3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against my ward in case he / she is found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

4. I hereby solemnly aver and undertake that

- a) My ward will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
- b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.

5. I hereby affirm that, if found guilty of ragging, my ward is liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force.

6. I hereby declare that my ward have not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging, and further affirm that, in case the declaration is found to be untrue, the admission of my ward is liable to be cancelled.

Declared this ____ day of _____ month of _____ year.

Signature of deponent

Address:

Telephone / Mobile No.:

VERIFICATION (Ragging Annexure-I)

Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at _____(place)___ on this the ____ (day) of _____ (month), ____ (year).

Signature of deponent

Solemnly affirmed and signed in my presence on this the ____ (day) of ____ (month) ____ (year) after reading the contents of this affidavit.

OATH COMMISSIONER

Note:

1. Clauses 3,7, & 9.1 of the regulations regarding ragging which are referred in the above affidavit are annexed for ready reference.
2. Full tests of Regulations on Ragging as required in the above affidavit are available on the Institute website regarding admission be carefully read and fully understand the provision contained in the said Regulations.

VERIFICATION (Ragging Annexure-II)

Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at _____(place)___ on this the ____ (day) of _____ (month), ____ (year).

Signature of deponent

Solemnly affirmed and signed in my presence on this the ____ (day) of ____ (month), ____ (year) after reading the contents of this affidavit.

OATH COMMISSIONER

Note:

1. Clauses 3,7, & 9.1 of the regulations regarding ragging which are quoted in the above affidavit are annexed for ready reference.
2. Full tests of Regulations on Ragging are available on the Institutes website regarding admission be carefully read and fully understand the provision contained in the said Regulations.

RAGGING

Clause 3 : What Constitutes Ragging :

Ragging constitutes one or more of any of the following acts: a) any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student; b) indulging in rowdy or indisciplined activities by any student or students which causes or is likely to cause annoyance, hardship, physical or psychological harm or to raise fear or apprehension thereof in any fresher or any other student; c) asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student; d) any act by a senior student that prevents, disrupts or disturbs the regular academic activity of any other student or a fresher; e) exploiting the services of a fresher or any other student for completing the academic tasks assigned to an individual or a group of students; f) any act of financial extortion or forceful expenditure burden put on a fresher or any other student by students; g) any act of physical abuse including all variants of it: sexual abuse, homosexual assaults, stripping, forcing obscene and lewd acts; gestures, causing bodily harm or any other danger to health or person; h) any act or abuse by spoken words, emails, post, public insults which would also include deriving perverted pleasure, vicarious or sadistic thrill from actively or passively participating in the discomfiture to fresher or any other student; i) any act that affects the mental health and self-confidence of a fresher or any other student with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other student.

Clause 7:

Action to be taken by the Head of the institution: On receipt of the recommendation of the Anti-Ragging Squad or on receipt of any information concerning any reported incident of ragging, the Head of the institution shall immediately determine if a case under the penal laws is made out and if so, either on his own or through a member of the Anti-Ragging Committee authorized by him in this behalf, proceed to file a First Information Report (FIR), within twenty four hours of receipt of such information or recommendation, with the police and local authorities, under the appropriate penal provisions relating to one or more of the following, namely:

- I. Abetment to ragging;
- II. Criminal conspiracy to rag;
- III. Unlawful assembly and rioting while ragging;
- IV. Public nuisance created during ragging;
- V. Violation of decency and morals through ragging;
- VI. Injury to body, causing hurt or grievous hurt;
- VII. Wrongful restraint;
- VIII. Wrongful confinement;
- IX. Use of criminal force;
- X. Assault as well as sexual offences or unnatural offences;
- XI. Extortion ;

- XII. Criminal trespass;
- XIII. Offences against property;
- XIV. Criminal intimidation;
- XV. Attempts to commit any or all of the above mentioned offences against the victim(s);
- XVI. Threat to commit any or all of the above mentioned offences against the victim(s);
- XVII. Physical or psychological humiliation;
- XVIII. All other offences following from the definition of "Ragging"

Provided that the Head of the Institution shall forthwith report the occurrence of the incident of ragging to the District Level Anti-Ragging Committee and the Nodal Officer of the affiliating University, if the institution is an affiliated institution. Provided further that the institution shall also continue with its own enquiry initiated under clause 9 of these Regulations and other measures without waiting for action on the part of the police / local authorities and such remedial action shall be initiated and completed immediately and in no case later than a period of seven days of the reported occurrence of the incident of ragging.

Clause 9 : (Sub Clause 9.1)

Administrative Action in the Event of Ragging:

The institution shall punish a student found guilty of ragging after following the procedure and in the manner prescribed hereunder :

- a) The Anti-Ragging Committee of the institution shall take an appropriate decision, in regard to punishment or otherwise, depending on the facts of each incident of ragging and nature and gravity of the incident of ragging established in the recommendations of the Anti-Ragging Squad.
- b) The Anti-Ragging Committee may, depending on the nature and gravity of the guilt established by the Anti-Ragging Squad, award, to those found guilty, one or more of the following punishments, namely:
 - I. Suspension from attending classes and academic privileges.
 - II. Withholding / withdrawing scholarship / fellowship and other benefits.
 - III. Debarring from appearing in any test / examination or other evaluation process.
 - IV. Withholding results.
 - V. Debarring from representing the institution in any regional, national or international meet, tournament, youth festival etc.
 - VI. Suspension / expulsion from the hostel.
 - VII. Cancellation of admission.
 - VIII. Rustication from the institution for period ranging from one to four semesters.
 - IX. Expulsion from the institution and consequent debarring from admission to any other institution for a specified period.

Provided that where the persons committing or abetting the act of ragging are not identified, the institution shall resort to collective punishment. c) An appeal against the order of punishment by the Anti-Ragging Committee shall lie,

- I. in case of an order of an institution,, affiliated to or constituent part, of a University, to the Vice-Chancellor of the University;
- II. In case of an order of a University, to its Chancellor.
- III. In case of an institution of national importance created by an Act of Parliament, to the Chairman or Chancellor of the institution, as the case may be.

ACADEMIC INSRUCTIONS

REFUND OF FEES

THE RULES OF CANCELLATION CHARGES AND REFUND OF FEES WILL BE ASPER THE “DIRECTORATE OF TECHNICAL EDUCATION” MAHARASHTRA STATE.

All students who are admitted in the Institute should carefully understand and make themselves familiar with the rules, regulations and other instructions issued from time to time pertaining to their academic, co-curricular and other activities. When in difficulties they should contact the Head of the Department concerned or to the Principal.

It may please be noted very clearly that the hon’ble Supreme Court has directed the educational Institutions to come down hard on ragging. The apex court has directed to apply tough measures to deal with this menace. The ragging would be met with exemplary punishment. A student found guilty of ragging is answerable to the anti ragging squads established by the Institute to ensure that the apex court order is scrupulously adhered to.

The welfare and directorate of the students are of paramount importance and is looked in the respective fields by the heads of the department, Principal and other authorities of the complex.

The head of the department is incharge of the academic work including Attendance and law of students. It may be noted carefully that the Attendance rules as notified by the University are followed without any change. Students should be present in all their classes.

Students must give their individual attention to their academic work and must respect their teachers and supervisors.

Smoking is strictly prohibited in the entire complex. Students must conduct themselves with proper decorum in classes, laboratories & in workshops

Students who fail to make sufficient progress as per the academic requirement in the classes are liable to be detained at the university semester examinations.



Fr. C. Rodrigues Institute of Technology

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