

College Profile, Academic Regulations, Scheme and Syllabus (1st year)

(Common to all Branches)
(With effect from 2018 - 19 Academic Year)

Bachelor Degree in Engineering Out Come Based Education with Choice Based Credit System



P.E.S. College of Engineering, Mandya - 571 401, Karnataka

[An Autonomous Institution affiliated to VTU, Belagavi,
Grant – in – Aid Institution (Government of Karnataka), World Bank Funded College (TEQIP),
Accredited by NBA, New Delhi and Approved by AICTE, New Delhi]

ಪಿ.ಇ.ಎಸ್. ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ

ಮಂಡ್ಯ-571 401, ಕರ್ನಾಟಕ

[ವಿ.ಟಿ.ಯು, ಬೆಳಗಾವಿ ಅಡಿಯಲ್ಲಿನ ಸ್ವಾಯತ್ತ ಸಂಸ್ಥೆ]

Phone: +91-8232- 220043/238042/220120/238330/238683

Fax: 08232 – 222075

E-Mail: principal@pesce.ac.in; Website: www.pescemandya.org / www.pesce.ac.in

P.E.S. COLLEGE OF ENGINEERING, MANDYA-571 401

*[An Autonomous Institution affiliated to VTU, Belagavi,
Grant – in – Aid Institution (Government of Karnataka), World Bank Funded College (TEQIP),
Accredited by NBA, New Delhi and Approved by AICTE, New Delhi]*

Contact:

Ph. No. – 08232-220043, 238683, 238042

Fax No.- 08232-222075

Email ID – principal@pesce.ac.in

Website: <http://pescemandya.org>

<http://pesce.ac.in>

VISION

“PESCE shall be a leading institution imparting quality Engineering and Management education developing creative and socially responsible professionals.”

MISSION

- *Provide state of the art infrastructure, motivate the faculty to be proficient in their field of specialization and adopt best teaching-learning practices.*
- *Impart engineering and managerial skills through competent and committed faculty using outcome based educational curriculum.*
- *Inculcate professional ethics, leadership qualities and entrepreneurial skills to meet the societal needs.*
- *Promote research, product development and industry-institution interaction.*

Quality Policy

Highly committed in providing quality, concurrent technical education and continuously striving to meet expectations of stake holders.

Core values

Professionalism

Empathy

Synergy

Commitment

Ethics

Principal Message



Since its inception in 1962, the PES College of Engineering, Mandya has established itself as a Premier Engineering Institution in Karnataka. It is engaged in imparting quality technological education and providing support to technical education and research activities. PESCE has committed to enhance capabilities and potential of our human resources with the objective of transforming them into leaders in their chosen area of interest. Our vision is to provide excellent technical education for the students, be globally competitive, so that our students can continuously contribute to a global and rapid technological revolution. PESCE has carved a position for itself among the best engineering colleges in India and is a dream institute for many budding engineers. Our distinguished alumni occupied coveted positions both in India and abroad and a rare source of pride and inspiration to us.

I am confident that with the concerted efforts of management, faculty, staff and students, PESCE will scale new heights of excellence in the years to come.

Dr.V. Sridhar
Principal

Vice Principal Message



PESCE, since from its inception, providing quality engineering Education to both rural and urban aspirants. The institution has, high class infrastructure with well-equipped Laboratories, Class Rooms, Library, well equipped Placement and Training center, Auditorium, Sports complex, independent Hostels for boys and girls, transportation facilities, medical help and a beautiful greenery campus. We are proud of strong team of meticulously trained, dedicated and committed faculty and staff with most advanced teaching aids.

As we strive for excellence in what we do, the Institute is constantly making endeavors to scale new heights by developing synergy between academic knowledge, technical skill set in line with industry needs, high moral values and sensitivity to the environment, society and the nation. Therefore, apart from academics, co-curricular activities, sports and cultural development will form an integral part of the life at PESCE from the very beginning of their career.

I am confident that with the concerted efforts of management, faculty, staff and students, PESCE will scale new heights of excellence in the years to come. With this I invite you to PESCE to experience the difference.

Dr. H. V. Ravindra
Vice Principal



Dr. Umesh D R

Preface

This document gives a brief insight about Profile of our College, Academic Regulations of the Autonomous System of the college, Scheme of teaching and examination with effect from 2018-2019 Academic year and 1st year Syllabus which is Common to all branches of Engineering.



Dr. P S Puttaswamy

PES College of Engineering, Mandya, started in the year 1962, has become autonomous institute in the academic year 2008-09. Since, then it has been doing the academics and assessment activities successfully. The college is running 8 undergraduate and 8 Postgraduate programs including MBA and MCA which are affiliated to VTU, Belagavi.

India has recently become a Permanent Member of the Washington Accord. The accord was signed by the National Board of Accreditation (NBA) on behalf of India on 13th June 2014. It enables not only the mobility of our degree globally but also establishes equivalence to our degrees with that of the member nations. The implementation of Outcome Based Education (OBE) has been the core issue for enabling the equivalence and of Indian degrees and their mobility across the various countries.

Our Higher Educational Institution has adopted the Choice Based Credit System (CBCS) based semester structure with OBE scheme and grading system which provides the flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. There lies a shift in thinking, teaching and learning process moving towards Students Centric from Teachers Centric education which enhances the knowledge, skills & moral values of each student.

Choice Based Credit System (CBCS) provides the options for the students to select from the number of prescribed courses. The CBCS provides a 'cafeteria' type approach in which the students can Choose electives from a wide range of courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, adopt an interdisciplinary approach for learning which enables integration of concepts, theories, techniques. These are greatly enhances the skill/employability of students.

In order to increase the Industry / Corporate readiness, many Soft Skills, Self-learning components and Personality Development modules have been added to the existing curriculum. In order to enhance creativity and innovation Internship and Self-learning Courses are made mandatory for all undergraduate programs.

Dr. Umesh D R
Deputy Dean - Academic
Associate Professor,
Dept. of Computer Science & Engg.

Dr. P S Puttaswamy
Dean - Academic
Professor,
Dept. of Electrical & Electronics Engg.

Contents

Particulars	Page No.
<i>College Profile</i>	
About P.E.S. College of Engineering, Mandya	CP-01
List of Governing Council Members	CP-03
Infrastructure	CP-04
Introduction to Autonomous System	CP-08
PESCE Training & Placement Centre (TPC)	CP-12
Research at PESCE	CP-14
Centre of Excellence	CP-16
Tie-ups with Foreign Universities	CP-17
Industry Institute Interaction activities	CP-18



Dr. H.D. Chowdaiah

College Profile



Sri K.V. Shankaragowda

P.E.S. College of Engineering, Mandya was started in the year 1962 by People's Education Society @, Mandya under the leadership of Late **Sri K.V. Shankaragowda**. The college is permanently affiliated to Visvesvaraya

Technological University (VTU), Belagavi, and has obtained Autonomous status in the year 2008-09 by the UGC. It is recognized by All India Council for Technical Education (AICTE), New Delhi and accredited by National Board of Accreditation (NBA). The college is functioning under the Grant-in-Aid code, Government of Karnataka and also beneficiary of TEQIP grants. The college is now managed by Peoples Education Trust @, Mandya and is led by **Sahakari Rathna Dr. H.D. Chowdaiah**, Ex MLC, MLA, as a Chairman. Also it provides excellent academic environment, sports complex and other amenities which are spread across 62 acres of beautiful lush green campus. The college is running eight Undergraduate BE programs and eight Postgraduate programs. It consists of six M.Tech programs, MBA and MCA which are affiliated to Visvesvaraya Technological University. The total intake of the college is 670 students for UG course and 146 students for PG course, besides more than hundred research scholars pursuing their M.Sc. (Engg.) & Ph.D. programs.

After obtaining the Autonomous status the Management has redefined its vision and mission ***"It is committed to develop student potential through high quality teaching – learning processes and state of the art infrastructure"*** and is determined to improve the academic standards and campus environment to impart Quality Technical education. As per the Washington Accord, we have revised our curriculum to adopt the Outcome Based Education (OBE). Further, Choice Based Credit System along with Out Come Based Education is adopted since 2015-16. Institutional Strategic Development Plan has been approved by Board of Governors for the year 2014 to 2020 to make students of PESCE as Professionally Excellent, Socially Committed Engineers in Synonym to PESCE. The TEQIP funds have been utilized effectively and all the Departments have procured latest equipment's to their laboratory to train students with the latest equipment as per industry standard.

To cater, the needs of the students, pertaining to Mechanical, Automobile and Industrial Production Engineering departments, new Computer Aided Design lab has been added to the infrastructure. The college campus computer network has been upgraded and entire campus is provided with Wi-Fi to access internet. In order to update the knowledge of the faculty and technical staffs with the latest technology, the faculty members and teaching staff are regularly deputed for the Faculty Development Programs (FDP) and technical trainings. The

FDP programs are regularly conducted in house by inviting experts from industries and reputed institutions.

Our college has got distinction of having research center in all the Engineering Departments recognized by the Visvesvaraya Technological University, Belagavi and also has got a PET Research Foundation which is being recognized by University of Mysore and Kuvempu University, Shimoga. There are 53 PESCE faculty members (Ph.D. guides) who are guiding more than 125 research students for Ph.D. in various disciplines and every year our college produces, on an average, 6 to 7 Ph.D. scholars in various disciplines.

The academic activities of the college is governed by a higher body called Academic Council and the Dean (Academics) which is in charge of the academic activities of the college. The curriculum is being updated as per AICTE Model curriculum to make our students to cope up with the day to day technological development. The Examination and Evaluations were carried out independently and the results are published as per the Visvesvaraya Technological University norms. The Controller of Examination (CoE) is the head of the Examination cell. The Autonomous Examination system in our college is well managed and earned good name in the state.

Management:

The PESCE is run by Peoples Education Trust® (PET), which was formed by philanthropic farmers of Mandya District, on a '*no profit*' basis. It is committed to the society and focused on providing quality education to the students of rural background. The PET has got nine institutions starting from High school to Degree level in Mandya city. The Chairman of the Trust is Dr.H.D.Chowdaiah, Ex. M.L.A and Ex. M.L.C of Karnataka. The PESCE Governing Council (GC) consists of members from good academic excellence like Dr. Krishna Venkatesh, Director, Centre for Incubation, Innovation, Research & Consultancy, Jyothi Institute of Technology, Thataguni, Bangalore, Dr. H.V. Venkatakrishna, retired Professor, NITK, Surathkal and Dr. Ramaswamy, retired Professor, Anna University, Chennai. The management is committed to fulfilling and exceeding the AICTE norms and has got the dream to build the institution to the level of international standard in technical education.

PET Group of Institutions

- PES College of Engineering , 1962
- PES College of Science , 1966
- PES Evening College, 1969
- Shankaragowda College of Education (B.Ed.), 1973
- PES Law College, 1986
- PES High School, 1988
- PES PU College, 2002

LIST OF GOVERNING COUNCIL MEMBERS

Sl.No.	Name of Member with Address	Designation
1	Dr.H.D. Chowdaiah, B.Sc. (Agri) Ex. M.L.A & Ex. M.L.C Holalu Village, Mandya	Chairman
2	Sri. H. Honnappa Ex. M.L.C Induvalu Village, KothathiHobli, Mandya Tq.	Member
3	Sri. A.M. Chandramohan S/o Late P.Mallaiah, 2 nd Cross, Subhash Nagar, Mandya	Member
4	Sri. Basavaiah Vice President PET®, Advocate, Mahilasamaja Road, Ashok Nagar, Mandya	Member
5	Sri. S.L. Shivaprasad Trustee, PET®, 2 nd Cross, Mathoshree, Bandhigowda Layout, Mandya	Member
6	The Director of Technical Education In Karnataka, Palace Road, Bangalore	Member
7	Regional Officer All India Council for Technical Education, S.W.R.O, Palace Road, Bangalore	Member
8	Dr. S.V. Ramaswamy Old No.37, New No. 87, 3 rd Main Road, Gandhinagar, Adayar, Chennai – 600 020 Mob: +91 9840231961	AICTE Nominee
9	Prof. H.V. Venkatakrishna No.110, Shravanthi Orchids, 1 st Main Road, Padmanabhanagar, Bangalore – 560 070	GOK Nominee
10	Dr. Krishna Venkatesh Director, Centre for Incubation, Innovation, Research & Consultancy, Jyothi Institute of Technology, Thataguni, Bangalore	VTU Nominee
11	UGC Nominee	
12	Dr.K.Narasimhachary COE & Professor Industrial & Production Engg. P.E.S.College of Engineering, Mandya.	Staff Representative
13	Principal P.E.S.College of Engineering, Mandya.	Principal & Ex-Officio Secretary, GC

Infrastructure:

The College perhaps has the best campus with state of art teaching facilities and environment for academic pursuit surrounded by lavish greenery on 62 acres land. It has spacious class rooms, well equipped labs and multimedia facilities to encourage students to make academic progression. The central library has around one lakh volumes of books and Journals hard copy: 125, E-Books: 1,12,000, E-Journals: 32,712, digital library, video lectures on advanced topics and numerous on-line subscriptions of International Journals. Each department has a separate building with well-maintained laboratories having latest equipment's which cater to the practical needs of the student. The internet and intranet facilities with Wi-Fi networking encourage one to be explorative. These are more than 3000 students currently receiving quality technical education under the guidance of 205 distinguished faculty members. The qualities, dedication and experience of the faculty are the highlights of this institute, where, 50 faculties holding Ph.D. degree and the remaining 151 are postgraduate degree holders. The average experience of the faculty is around 17 years. The teacher-student relationship makes the entire atmosphere more conducive for learning with activities such as coaching, guiding, counseling and mentoring. The facilities such as Canteen, Dispensary, Boys & Girls hostels, Bank and Co-operative stores make the stay at PESCE very comfortable.

Graduate Programs

Sl. No.	Program	Year of Starting	Present Intake
1.	Civil Engineering.	1962	120
2.	Mechanical Engineering	1962	120
3.	Electrical & Electronics Engineering	1962	60
4.	Electronics & Communication Engineering.	1971	120
5.	Automobile Engineering	1980	30
6.	Industrial & Production Engineering	1980	40
7.	Computer Science & Engineering	1983	120
8.	Information Science & Engineering	2000	60
Total Intake			670

Postgraduate Programs

Sl. No.	Program	Year of Starting	Present Intake
1.	M.Tech. Computer Integrated Manufacturing	1999	18
2.	M.Tech. Machine Design	2013	24
3.	M.Tech. Computer Science & Engineering	2000	18
4.	M.Tech. Computer Engineering	2012	24
5.	M.Tech. CAD of structures	2002	18
6.	Master of Computer Applications	1992	60
7.	Master of Business Administrations	2009	60
8.	M.Tech. VLSI Design & Embedded Systems	2012	24
Total Intake			246

- **Student Strength: 670 UG, 246 PG, 134 Research Scholars**

Faculty Strength		205	
Ph.D.		50	
M.Tech. /ME/ M.Sc.		151	
B.E./B.Tech.		4	
Faculty & Student Ratio			
Sl. No	Department	Ratio	
		UG	PG
1.	Civil Engineering.	1:15	1:12
2.	Mechanical Engineering	1:15	1:12
3.	Electrical & Electronics Engineering	1:15	--
4.	Electronics & Communication Engineering.	1:15	1:18
5.	Automobile Engineering	1:15	--
6.	Industrial & Production Engineering	1:15	--
7.	Computer Science & Engineering	1:15	1:12
8.	Information Science	1:15	--
9.	Master of Computer Applications	--	1:16
10.	Master of Business Administrations	--	1:15

Library and information center

The institution has a good central library housed adjacent to administrative block. The sections in the library are Circulation, Reference, reading room, Digital library, newspaper and magazine sections. This is provision on for one hundred students can study at a time in the library. Library has good collection which caters the educational needs of users.

The library collection is fully automated and books are bar-coded and classified as per Dewey decimal classification also the book transaction is computerized.

Collections

The library has a collection of more than one lakh items including books, journals, magazines, standards, project reports and other materials in the field of technical and management sciences. Also separate digital library is equipped with collection of 2,200 CDs and 24 computers for accessing E-resources.

Services and facilities

1. OPAC (Online Public Access Catalogue) is created for book searching.
2. IR is created for collecting, preserving, and disseminating digital copies of the intellectual output of an institution like journal article, conference papers, project reports, theses and question papers.
3. Digital library has 24 exclusive nodes connected to different servers hosting connection to a lot of e-resources including e-journals, e-books and other materials.
4. All the subscribed e-journals are made remotely accessible via Knimbus.
5. The reference section is serving the users with special collection like competitive examinations, dictionaries, handbooks, standards etc.

6. Magazine section cum reading room provides peaceful atmosphere to study inside the library.
7. Library is a member to VTU Consortium and availing access to 9 journal databases such as IEEE, Science Direct, Taylor and Francis, Springer, Proquest Management and Technology, ASME, ASCE and Knimbus.
8. Library is a member to NDL and access is provided to the same.
9. Access to SWAYAM is provided.

On-Campus Computing Facilities

- Separate Multimedia CAED lab for 1st year students.
- Campus connectivity using Optical Fiber Networks.
- Wi-fi connectivity throughout the campus.
- 125 MBPS Internet connectivity
- Independent computer centers in all departments.
- College website <http://www.pesce.ac.in> and <http://www.pescemandya.org>

Centralized Sophisticated Instruments Facilities

- VLSI Design lab with CADANCE EDA Tools
- Total Station
- Atomic Absorption Spectra Photometer
- CNC Lathe and CNC Milling Machine
- Wire Electric Discharge Machine (WEDM)
- Machine Vision Image Processing Lab
- Partial Discharge Analyzer
- Shielded Chamber
- Computerized Wheel aligner
- Extrusion Honing machine
- Journal Bearing Test Rig
- Trust Bearing Test Rig
- Advanced Metrology Lab

Major Labs

- Computer Aided Engineering Drawing Lab
- Diagnostic Maintenance Lab
- CAD/CAM Lab
- High Voltage Testing Laboratory
- Internet & Wi-fi Browsing (with 100 MBPS)
- Computing Laboratories
- Networking Laboratory
- VLSI Lab
- Metrology Laboratory
- Tribology Lab
- Wind Tunnel Lab

Other Facilities

- Transport Facility
- Reprographics facility in all Departments
- Canteen facility
- Dispensary
- Purified soft Drinking water (RO) with cooler facilities are provided in all departments throughout the campus
- Back up and generator power supply provided to all departments.
- Solar water heaters in all the hostels
- Parking lot for two and four wheelers
- Cooperative Stores for Student benefit
- State Bank of India as campus bank
- State Bank ATM facility
- Smart class rooms
- Air-conditioned auditorium with ICT facility having 400 seating capacity
- Open auditorium having a 1000 seating capacity

International standard Sports Complex.

- PET Cricket Stadium
- PET Aquatic Centre
- PET Indoor Stadium
- PET multi Gym. Centre
- Kho-kho court
- Basket Ball Court
- Volley Ball court
- PET Tennis Court
- PET Football/Hockey Stadium
- Multipurpose Stadium

Hostels Facilities

VSVM Boys hostel –off campus.

Situated 1km away from the campus and very close to central bus stand.

Number of rooms: 65 triple occupants and 5 quadruple occupants

Number of inmates: 215

Facilities: Free medical, Library, TV room, solar water heaters, Closed-circuit television (CCTV), separate Mess and bus conveyance to campus.

PESCE Boys Hostel

Situated inside the campus.

Number of rooms: 89 single, 21 double and 73 triple occupants

Number of inmates: 350

Facilities: Free medical, Library, TV room, Wi-Fi internet connectivity, Play ground and separate mess

PESCE Girls Hostel

Situated inside the campus.

Number of rooms: 67 double and 79 triple occupants

Number of inmates: 371

Facilities: Free Medical, Library, TV room, solar water heaters, Closed-circuit television (CCTV), Wi-Fi internet connectivity, Play ground and separate mess

Co-curricular Activities:

An active student chapter of many professional bodies such as ISTE, IEEE, SAE, IETE, Red Cross Society, GLUG, NEN and CSI is made available for the students to explore their hidden talents.

Introduction to Autonomous System

The affiliating system of colleges was originally designed when their number in a university was small. The university could then effectively oversee the working of the colleges, act as an examining body and award degrees on their behalf. The system has now become unwieldy and it is becoming increasingly difficult for a university to attend to the varied needs of individual colleges. The colleges do not have the freedom to modernize their curricula or make them Industrial oriented.

The exercise of academic freedom by teachers is a crucial requirement for development of the intellectual climate of our country. Raising the quality of higher education is the joint responsibility of students, teachers and management and it is imperative that they share it equally. The safe and better way to improve the quality of undergraduate and postgraduate education is to delink colleges from the affiliating structure. It is targeted to make 10% of eligible colleges autonomous by the end of the 10th Five Year Plan. Hence, the Education Commission (1964-66) recommended the college autonomy which is the instrument for promoting academic excellence.

Freedom of Autonomous colleges:

An autonomous college will have the freedom to:

- Determine and prescribe its own courses of study and syllabi, restructure and redesign the courses to suit Industry needs.
- Evolve methods of assessment and performance of students, conduct of examinations and notification of results.
- Use modern tools of educational technology to achieve higher standards and greater creativity.
- Promote healthy practices such as community service based projects for the benefit of the society at large.

Role of the Parent University (VTU, Belagavi):

The role of the Parent University is to promote Autonomous System by bringing more autonomous colleges under its fold. The parent university will:

- Promote academic freedom in autonomous colleges by encouraging introduction of innovative academic programs.
- Facilitate new courses of study, subject to the required minimum number of hours of instruction, content and standards.

- Permit them to issue their own provisional degree and other essential certificates.
- Ensure that degrees/diplomas/certificates issued indicate the name of the college.

The Academic Council will be solely responsible for all academic matters, such as, framing of academic policy, approval of courses, regulations and syllabi, etc. Dean (Academic) is the Member Secretary of Academic Council. The Council will involve faculty at all levels and also Academic Council consists of panel of experts drawn from academia of highest caliber from outside, including representatives of the university and the state government.

The BOS is the basic constituent of the academic system of an autonomous college. Its functions will include framing the syllabi for various courses, reviewing and updating syllabi from time to time, introducing new courses of study, determining details of continuous assessment, recommending panels of examiners under the semester system, etc.

Award of Degrees through Parent University:

The parent university will award degree to the students evaluated and recommended by autonomous colleges. The degree certificates will be in a common format devised by the university. The name of the college will be mentioned in the degree certificate, if so desired. Autonomous colleges that have completed three terms can confer the degree under their title with the seal of the university.

Autonomous System @ PESCE:

The Education Commission has recommended college autonomy which is the instrument for promoting academic excellence. There are only 10% of the eligible colleges were targeted to make autonomous at the end of 10th Five Year Plan based on this PESCE, Mandya has become autonomous in the year 2008.

Autonomous colleges are free to make use of the expertise of University departments and other institutions to frame their curricula, devise methods of teaching, examination and evaluation. The parent university will accept the methodologies of teaching, examination, evaluation and the course curriculum of its autonomous colleges. It will also help the colleges to develop their academic programmes, improve the faculty and to provide necessary guidance by participating in the deliberations of the different bodies of the colleges.

The Right of Autonomy may not be conferred once and for all. It has to be continuously earned by the college. The status of autonomy will be granted initially for a period of six years. The autonomous college with the approval of its Academic Council will formulate an appropriate mechanism to evaluate its academic performance, improvement of standards, and assess the extent and degree of success in the utilization of autonomy. In addition, there will be two external evaluations, the first after four years and the second after six years. The latter evaluation will determine the continuance or revocation of autonomous status.

The university will review the functioning of autonomy in an autonomous college at the end of the fourth year with the help of a committee constituted for the purpose. This committee may consist of one nominee of the UGC, one nominee of the parent university, one nominee of the State Council for Higher Education and two experts from outside the state to be nominated by the university.

Academic Cell:

The Academic Cell has been formed to supervise the academic affairs headed by the Dean (Academic), Principal and HODs of different departments. The cell regularly collect information related to academic needs, syllabus formation, course coverage, academic scheduling and time table etc. The main profile of the cell is to interact with university, examination cell as well as local governing bodies involved in academic proceedings.

Important activities of the academic cell are as follows:

- Preparing the academic calendar of UG and PG in consultation with COE office.
- Responsibility to constitute the BOS of all the departments, Academic senate and other Academic bodies.
- Responsibility of framing the syllabus time to time and look into the anomalies if any.
- Fixing the credits to various courses in consultation with COE
- To initiate the necessary formalities to introduce any new course required by the department.
- Interact with the COE as and when required to solve any problem related to credit system
- To supervise the academic standards and quality of the curriculum and inform the necessary board to take action if required.
- To interact with the DUGC, if necessary regarding academic issues.
- Getting Approval for Confer Degree to the students from the affiliated university.
- Making arrangements to award certificates to the students at the end of their degree.

Dr. Umesh D R
Deputy Dean - Academic
Associate Professor,
Department of Computer Science & Engg.

Dr. P S Puttaswamy
Dean - Academic
Professor
Dept. of Electrical & Electronics Engg.

Examination Cell



Sri.K.M .Ananthu

The Examination cell has been formed to supervise the examination & evaluation process which is headed by the COE. The conduct of examinations in the autonomous system is an important academic activity to bring out the student's performance. In this context, Examination Cell plays a key role



Dr.K.Narasimhachary

in the evaluation process. At each and every stage in the evaluation process, including Continuous Internal Evaluation (CIE), Semester End Examinations (SEE), Make-up Examinations (MUP) and Supplementary Semester Examination (SSE) COE along with Deputy Controller of Examinations (Dy. COE) meticulously monitor the performance of students by giving suitable guidelines to various departments in the institution from time to time.

Important activities of the examination cell are as follows:

- Overall conduction of examination (CIE, SEE, MUP & SSE) process, this includes, scheduling the examination dates, to take necessary action to set the question papers from the examiners, printing the question papers (CIE of I & II semesters, SEE, MUP & Supplementary Exams) and distribution.
- Announcement of the examination fee and other fees related to examination.
- To provide proper notification to the departments related to the examination process and conducting the examination time to time.
- Getting CIE marks from the departments from time to time also monitors the CIE process and informs any irregularities to the Principal.
- Conduction of valuation work, processing the results, announcement of the results, issuing the grade cards and PDC.
- **Maintenance of confidentiality** of the examination system.
- Conduction of Malpractice committee meeting and issuing all notification related Malpractice.
- Strictly adhere to the university instruction regarding Autonomous Examinations.
- Coordinating with the Dean (Academic) to implement the autonomous discipline as per the UGC and VTU guidelines.

Deputy Controller of Examination

Sri.K.M .Ananthu
Associate Professor,
Dept. of Civil Engineering

Controller of Examination

Dr.K.Narasimhachary
Professor
Dept. of Industrial & Production Engg.

PESCE Training & Placement Centre (TPC)

PESCE Training & Placement Centre (TPC) is working towards inculcate values of perseverance and perfection in each student, to achieve professional and personal excellence. The TPC plays a very critical role in acclimatizing students to a corporate setting, which complements the academic skill-set for which they are taught. The TPC strives to bridge the gap between college and corporate culture, with the ultimate objective of producing industry-ready professionals.

The Students are exposed to thorough training in the **aptitude, verbal, technical and soft skills** segments, which play a pivotal role in not just the campus recruitment process, but in other competitive exams also. A “**Strategic**” Training Model, which is incorporated throughout the semester, ensures completion of syllabus within a week, followed by exhaustive assessments over the course of the term. This model will be employed for the first six semesters.

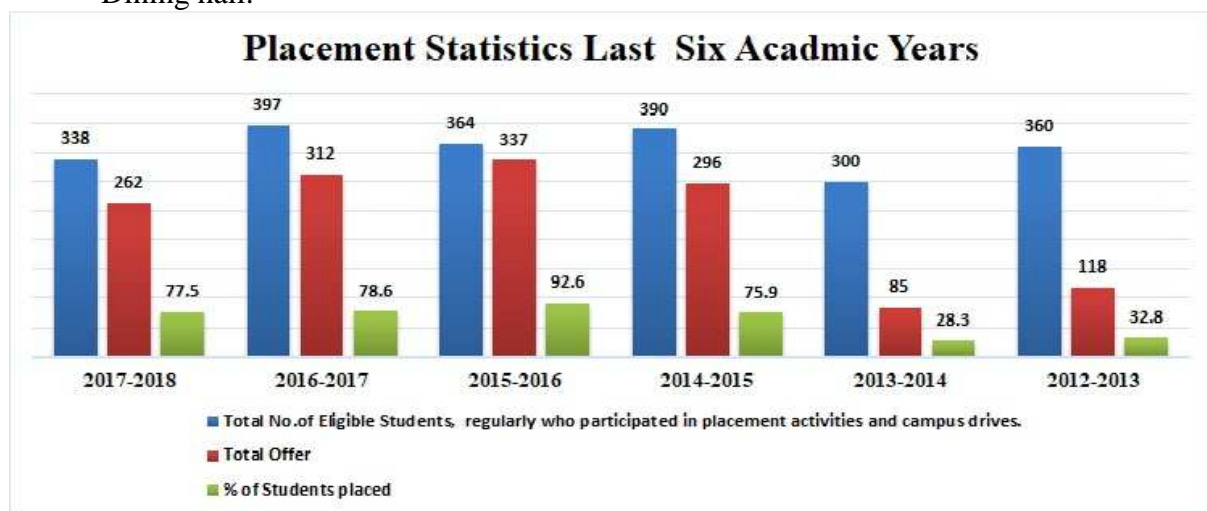
An intensive “**Vocational**” placement specific training programme is being conducted before and after 6th semester. A “**Company-Specific**” training programme helps to equip the students for different recruitment processes; they face in the 7th semester.

The above mentioned is better achieved by employing **conductive class** dynamics, where, the class is divided into groups after careful prior analysis, such that the acumen of every group is the same. A **score board** is maintained for each class to build a sense of healthy competition.

Students’ performances are tracked after regular **topic-wise** assessments and analysis to find each student’s area of improvement and hence further provide them with **follow-up** sessions. **Periodic counseling** is provided to the students by **certified counselors** to enhance their personality and presentation skills. The mix of personality and proficiency building helps to create individuals of substance with leadership quality, completely prepared for any kind of **professional** challenges.

Facilities at Training and Placement Cell

- Dedicated building for training and placement activities.
- Air Conditioned Auditorium for 400 audiences.
- Auditorium is multimedia enabled for an effective presentation.
- Training rooms to conduct both online and offline trainings.
- Board room to conduct meetings.
- Group discussion and Interview rooms.
- Dining hall.



Our Recruiters



Placement Activities

1. Throughout the year placement training is provided to our students by corporate professionals, alumnus from IIM, IIT and symbiosis
2. Training is provided to our students in aptitude, verbal, technical and soft skills segments, which play a pivotal role in the campus recruitment and also in other competitive exams.
3. Intensive vocational placement specific training program are conducted before and after 6th semester
4. During 7th semester students will undergo company specific training.
5. Periodic counseling is provided to the students by certified counselors to enhance their personality and presentation skills

Our Goal

Target for the coming years is to achieve above 90% placement



Sri. Anand M J

Research at PESCE

The Institute currently offers M.Sc. (Engineering by Research), M.Sc. (Technology by Research) and Ph.D. under PET research foundation with degrees affiliated to Visvesvaraya Technological University, University of Mysore and Kuvempu University. All the departments of



Dr. S L Ajit Prasad

the institute are recognized as research centers under VTU, whereas, E & E Dept. has additional recognition of Kuvempu University and departments of E&C, CS&E, Mathematics and Chemistry have additional recognition as research centers under University of Mysore for the research programmes. These are more than 138 students from industry and academias are enrolled with PET research foundation for Ph.D. programmes and the institute has produced 85 Ph.Ds. and 14 M.Sc. Engg. till date. The Research scholars and faculty members are involved in many research projects funded by UGC, DST, DRDO, AR&DB, VGST and AICTE.

Objectives

- Promote research within the Institute.
- Provide information of funding opportunities to support faculty research, and oversees systems and processes related to externally fund sponsored /consultancy project.
- Facilitates conferences and workshops held at the Institute.
- Promote Research and developmental activities

Recognition

- All departments are recognised as Research centre by VTU.
- University of Mysore has recognised PET Research centre for doing research in the field of Electronics, Computer Science, Mathematics, Science and Chemistry.
- Kuvempu University has recognised a few of the guides to carry out research in Electrical Engineering.

Ph.D. Awardees (Branch Wise)

Branch	Number of awardees
Civil Engineering	12
Mechanical/Automobile/IP	14
Electrical/Electronics	33
CS/IS	13
Mathematics	07
Chemistry	01

Research Programs

M.Sc. (Engineering) by Research and Ph.D. under VTU, Belagavi

- | | |
|---|----------------------------------|
| ➤ Civil Engineering | ➤ Computer Science & Engineering |
| ➤ Mechanical Engineering | ➤ Physics |
| ➤ Electrical and Electronics Engineering | ➤ Chemistry |
| ➤ Electronics and Communication Engineering | ➤ Mathematics |
| ➤ Automobile Engineering. | ➤ MBA |
| | ➤ MCA |

PET Research Foundation

Program	Affiliated to
Electronics & Communication Engg. Computer Science & Engg. Physics , Chemistry and Mathematics	University of Mysore Mysore
Electrical & Electronics Engg.	Kuvempu University Shimoga

Ongoing Research Projects

- Image Processing technique for automated inspection & flow Visualization
- View Metrology on un-calibrated 2-d images and an approach to 3-d modeling and rendering

Deputy Dean Research

Sri.Anand M J

Assistant Professor

Dept. of Electronics and Communication Engg.

Dean (Research)

Dr. S L Ajit Prasad

Professor

Department of Mechanical Engineering

Centre of Excellence

- **Dr. V. Sridhar** **VLSI Design Lab**
 To provide good VLSI design facility to UG and PG students and develop a facilities to research scholars in the field of VLSI design for achieving excellence in this field. To motivate faculty members to take up research work and guide students in this specialize area. To conduct regular training program for students and faculty members from other colleges and poly techniques who wants to improve their knowledge and practical skill in VLSI design and embedded system. The facilities available in the VLSI and HDL lab are CAD tools 6.1.6.64 bit version, Xilinx EDA tool ISE 14.2 software and FPGA kit such as Spartan 6, Virtex 5 ,Virtex 6. Using these facilities, the PG and UG students can do experiments and projects in VLSI design and HDL. The research scholar can use these facilities for doing research in this area.
- **Dr. H. V. Ravindra** **Center for Diagnostic Maintenance (CDM)**
 Condition-Based Maintenance (CBM) and Prognostics has emerged over recent years as a significant technology that is making an impact on industrial maintenance practices. CBM technology is characterized by the merging and strong coupling of interdisciplinary trends from the engineering sciences, computer sciences, reliability engineering, communications, management, etc. All these diagnostic and prognostic technology elements, techniques, and capabilities must be applied and implemented wisely to obtain the maximum benefit impacts. The applications are in manufacturing systems, power plants, turbines, bearings, chemical plants, on-board car-engine diagnosis. Condition monitoring equipment is used extensively in the energy, petrochemical, cement, steel, paper and pulp industries.
- **Dr. H.S. Sheshadri** **Medical Image processing laboratory**
 Facilities / services available: High end work stations with high resolution monitors (desktop computers), MATLAB Software-Version 15.B, Teaching Aid Interactive Panel, Network Accessories Router Cisco 1905. Work being carried in the areas; Diabetic Retinopathy, Retinopathy of Prematurity, MRI Image segmentation algorithms and Medical Image Denoising.
- **Dr. B. Ramachandra** **High Voltage Insulation Laboratory**
 Facilities / services available: Shielded Chamber Based on faraday cage Principle, Vacuum system with high pressure chamber, High Frequency High Voltage Generator, Aplab 30MHz Dual Trace Oscilloscope, PD free High voltage Generation Unit, Shielded chamber based on Faraday Cage principle & PC based partial Discharge analyzer
- **Dr. L. Prasannakumar** **Center for Alternative Energy Resource (CAER)**
 Facilities / services available: Awareness on Rain Water Harvesting and Bore well recharging techniques, Global warming, Green Environment, Water Pollution, Demonstration of Solar Energy, Bio- Fuel and Bio Gas production using Kitchen waste. Encouraging various research activities in the entire Bio fuel chain involving universities and research organization (UG students project program)
- **Dr. M C Padma** **Internet of Things (IoT) Laboratory**
 Facilities / services available: Development boards compatible with Arduino platform, microchip chip kit platform and Zolertia boards, Raspberry PI boards for embedded and sensor networks and HP Intel core duo systems. Lab is dedicated for doing project and research oriented work.

Tie-ups with Foreign Universities



Binghamton University, USA, A world-class institution established in the year 1946 and located in the high –tech heart of New York State of USA. Binghamton University (BU) is one of the premier public universities in the north east. BU offers student a broad, interdisciplinary education with an international perspective and one of the most vibrant Master and Doctoral (research)

programs. Ranked 10 among the elite public universities in the country, Binghamton challenges students academically, not financially, in its unique, best-of-both-worlds environment.

PESCE, Mandya has signed a Memorandum of Agreement (MOA) with BU on 25th of May 2017, at 4400 Vestal Parkway East, Binghamton, NY 13902, USA. The collaboration aims to foster advancement in teaching, research, academic collaboration and cultural understanding and to create avenues for enhancing learner experience at both entities as well as strengthen both entities. PES college and Binghamton university will broadly explore avenues for cooperation in i) Student and faculty Exchange, ii) short courses, iii) Joint Research and Workshops, iv) Exchange and sharing of research and teaching ideas, v) PhD co-advising and vi) other Academic Exchanges.



Portland state University, USA



Portland state University (PSU) is Oregon's public urban research university located in the heart of downtown of Portland situated at North West of USA. It is ranked as one of the nation's top 10 "most innovative" universities by *U.S.*

Initial talks have taken place between PESCE, Mandya and the Department of Electronics and Computer Science Engineering of PSU to have Research Collaboration and other academic exchanges.

Industry Institute Interaction activities

Now a days India plays a major role in the rapid change of technology, the developments at various fields of technologies are due to the contribution of both industry and academia of the country. The industry and institution are interdependent on each other for new inventions and discoveries to meet the demands of the present problems of the society. It is a fact that when industry and institution go by hand to hand and cooperate with each other so that more innovations can happen. This creates healthy environment in the country by which there will be an all round development. This would be an important factor in making the economy of the country more strong. Both industry and institution play a vital role in the development of the nation.

For the above reason, the college has initiated the formation of Industry Institute Interaction Cell (with a Dean and one III coordinator from each department) in the year 2015 to boost up the following activities of Industry interaction

- Helping to carry out consultancy works
- Revenue generation programs for Institute
- Industrial training for students in your organization
- Student project work in industries/your organization
- Industry Study Tour Programmes
- Interaction with your organizations for conducting joint research work involving faculty/scientists and students/ research scholars,
- Faculty exchanges
- Personality development workshop
- Guest lectures
- Continuing education programmes
- Short - term training programmes
- In house training programmes
- Industrial visits
- Deputing your faculty to work during the lean period
- Organizing workshop/seminar periodically and invite the corporate people to deliver lecture and interact
- Joint Faculty Development Programs
- Panel Discussions
- CEO Interactions
- Corporate Excellence Award Functions / Institution of Awards by your organizations
- Signing MOU's with industry and other institutes.

MOU's with Company/Organizations

- Coreel Technologies, Bengaluru
- Meritor HVS India Ltd., Mysuru
- Here Solutions India Pvt.Ltd, Gurgaon
- NVIDIA Graphics Pvt.Ltd., Bengaluru
- Forth Ambit Technologies Pvt. Ltd. Bengaluru
- Global edge Software Ltd. Bengaluru
- APTINIA Inc., Bengaluru
- Sri Manjunatha Design Solution, Bengaluru
- IEEE, New York, USA
- Infosys Ltd., Mysuru
- FTD Automation Pvt. Ltd. Bengaluru
- EMC²,Bengaluru

- Tiny chip solutions, Bengaluru
- Perk data systems Pvt. Ltd. Bengaluru
- Foundation for Advancement of Education and Research (FAER), Bengaluru
- Intel, Bengaluru
- Quality Evaluation and Systems Team Pvt. Ltd., Bengaluru
- Seven craft groups, Bengaluru

MOU's (Under Process) with Company/Organizations

- Vi Microsystems Pvt. Ltd., Chennai
- Yokogawa Technical School, Bengaluru
- Bosch India Pvt. Ltd. Bengaluru
- Zes Tech Global Pvt. Ltd. Bengaluru
- Sun softronic systems, Bengaluru
- M/s Zebra Technologies India Pvt. Ltd. (Motorola solutions), Bengaluru
- Torsteel Ltd. Bengaluru
- M/s N. Ranga Rao and Sons, Mysuru
- M/s Shahi garments, Bengaluru

Number of MOU's	: 18
MOU's Under Process	: 09
Total	: 27

MOU with Industries

- ✓ **Tata ELEXI:** EC, CSE, ISE Students projects
- ✓ **Coreel Technologies, Bengaluru**
- ✓ Meritor HVS India Ltd., Mysuru
- ✓ Here Solutions India Pvt. Ltd, Gurgaon
- ✓ NVIDIA Graphics Pvt. Ltd., Bengaluru
- ✓ Forth Ambit Technologies Pvt. Ltd. Bengaluru
- ✓ APTINIA Inc., Bengaluru
- ✓ IEEE, New York, USA
- ✓ Foundation for Advancement of Education and Research (FAER), Bengaluru
- ✓ Intel, Bengaluru
- ✓ FTD Automation Pvt. Ltd. Bengaluru
- ✓ EICHER Tractor Ltd
- ✓ MICO BOSCH Bengaluru
- ✓ **NIMHANS:** ISE Research association. To support FMRI data
- ✓ **Ktwo:** EC, CSE, ISE Research
- ✓ **EMC²:** EC, CSE, ISE Training Faculty and students in Mass storage
- ✓ **Infosys:** All Campus connect programme
- ✓ **Navigure:** EC Research
- ✓ **Builders Associations:** Civil Constructions related training activities
- ✓ **TCS:** All programs for placement reg.
- ✓ **Global Edge:** EC, CSE, ISE Training Faculty and students.

Student Associations:

To enhance academic progression and creative culture of students, our Institution encourages the students to take part in various activities being conducted by the following associations

- | | |
|-----------------------|--------|
| • IEEE | • CSI |
| • ISTE PESCE CHAPTER | • NEN |
| • SAE COLLEGIATE CLUB | • GLUG |

Strengths

- Committed Management
- Good Brand Name
- Good Infrastructure
- Aided & Autonomous Institution
- Qualified & Experienced Faculty
- High Retention of Employees
- Research Expertise (30 % Ph.Ds)
- TEQIP and Research Grants
- 100 % Admissions
- Green Campus
- Very Good Sports Complex
- Strong Alumni

Opportunities

- Innovative learning & teaching
- MOUs/Collaborations
- Starting of New Courses in Engineering
- Global initiatives
- Use of latest technology
- Upgrading faculty through QIP
- Establishing Residential Campus
- Opening of New campuses
- University status

Our Illustrious Alumni

Sri. Umesh Chandra Executive Director Aerospace, BEML Ltd., Bengaluru	Dr B N Suresh Padmavibushana Awardee, Director of ISRO's, Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram
Dr. S. Guruprasad Advisor, R & DE (Engg.), Defense Research & Development Organization (DRDO) Ministry of Defense, Govt. of India, New Delhi.	Mr. Ivan Fernandes chairman and Managing Director, Ducont, Dubai - 1985 batch
	Mr. Gopal Krishana Mico Bosh Ltd. , Bengaluru
Mr. Samartha Raghava Nagabhushan Managing Director and CEO 5BARZ India. 1993 batch	Vipin Chandra Shetty Hydrologost, serving in Gulf countries
	G.M. Madegowda Superintendent engineer, KUESB, Hubli
Mrs. Sheela Prabhakar Vice president, Industrial & Defence Solutions, ITTIAM system, B'lore – 1984 batch	Mr. Rangaraj M Rangayyan Professor, Dept of Electrical and Computer Engg, University of Calgary – 1976
Dr. Sumohan Associate Professor, IIT Hydrabad	Mr. Sudheendra Koushik Vice president Innovation, TTK Groups
Dr. M K Krishana Director, CMRTU, Bengaluru	M Vasu Division Controller KSRTC, Karnataka
Mr. Annadani Senior Manager, Volvo Ltd., Bengaluru.	Mr. Mohan Iyenger Vice-President General Motors