

Vision of the Institution

“To be a Premier Institute in the Region which develops Competent Engineers and Managers, capable of Leading Team with Social, Ethical and Environmental values”

Mission:

- Imparting Quality Education through best Academic Practices
- Enabling the students to develop Practical Skills through Laboratory Experimentation and Technical, Managerial, Research and Innovative Projects
- Developing Managerial and Leadership Competence amongst the students through Industry Institute Interaction and Co-Curricular activities
- Imparting Social, Ethical and Environmental Awareness among the students through Extra Curricular activities

Quality Policy:

“We at MSSCET, Jalna are committed to develop Engineers & Managers through Best Teaching Learning practices with team spirit. Our students and Teachers are enabled to Excel in the Technical & Industrial field with Values of Life and participate in Nation building. We also commit for continuous improvement in Skills, System, Infrastructure and Services to satisfy all the Stakeholders”

Core Values:

In our Engineering institute Students seeking admission from rural area and trust of their parents are the primary reasons we exist as an Engineering Institution and our core values are:

- **Environmental stewardship:** Committed in practicing green technologies for sustainable development of the Nation and use of Non-renewable energy for pollution free environment.
- **Responsibility:** Everybody in the Institute is expected to discharge his/her duties with due responsibility without any agitation.

- **Integrity:** All the activities should be conducted in an ethical and discipline manner. Teaching shall be carried out in an environment of academic freedom and honesty.
- **Respect of Individual:** While carrying out the interactions at all levels, the dignity and respect of an individual is observed and maintain without fail.
- **Faculty Empowerment:** Institute promotes and encourages faculty in their individual academic development for the betterment of students and Institute and themselves.
- **Transparency:** The working style and general records of maximum aspects of the functioning are maintained transparent.
- **Service to Nation:** Institute is committed to developing the skilled manpower to serve the Nation by providing the services to boost the knowledge and the moral of each individual.
- **Accountability:** The roles and responsibilities are assigned and people are held accountable for their deeds. We feel our liability towards the society and our actions add values to the Institute for better prospect.
- **Discipline:** Treat Students with respect & get engaged and involved in co- curriculum & extra co -curriculum activities with work on their social-emotional skills. Be fair and consistent with full of positive attitude.

Profile of the Institution

This is the only engineering college in district which has been started to help the economically weak student to make career in engineering fields at affordable fees. The institute has been started with social vision to develop the rural masses, which were remaining ignored from quality education in technical field. The management and faculty commit themselves to their pursuit of excellence in technical education through dissemination of knowledge, development and technical skills.

The college has excellent infrastructure situated, near to historical city Aurangabad. The college buses and city buses are available from Jalna city to college and travel time is hardly 15 minutes. The Institute has well planned and ventilated infrastructure for each department. All departments have well equipped laboratories with facilities for experiments. All departments have Internet facility with OFC backbone and 32 Mbps leased line Internet link. Seminars, Contests, Short-term courses and various educational programmes are conducted regularly for students and faculty. It offers a thorough living and learning experience with its spacious class rooms, air conditioned computer labs, Soft skill Labs. Many reputed companies visit the institute for campus recruitment.

Bachelor Programs in Engineering (B.E.)

1. Civil Engineering
2. Computer Science and Engineering
3. Electrical and Electronics Engineering
4. Mechanical Engineering

Post-Graduate Programs (M.E/ MBA)

1. Electrical Power Systems
2. Mechanical Engineering
3. Master of Business Administration

Diploma in Engineering (Polytechnic)

1. Civil Engineering
2. Computer Science and Engineering
3. Electrical and Electronics Engineering
4. Mechanical Engineering

Stake Holders' Expectations

Managemet

- National Brand
- Sustainability
- Good Governance
- University Status
- Social Responsibility

Academic Advisory Board

- MSS's CET ranking with in top 50 in Maharashtra
- Competant Faculty
- Internal Revinue Growth for sustainability
- Industry Oriented/ Contineouing education programs
- Bench marking through accreditation of programs and Institution
- Creation of Centers of Excellence

Faculty and Staff

- Good Academic and Working Ambiance
- Carrier Growth, Research Facilities and Incentives
- Academic independance with accountability
- Transperancy and uniform process

Students

- Good academic and research ambiance
- Support for co-curricular and Extra curricular activities
- State of the art infrastructure
- Experimental learnng and Opportunity for talent exposure
- International learning in affordable cost
- Quality Placement, carrier guidance and Enterpreneurial Opportunities

Parents

- Branding
- Quality teaching- Learning
- Disciplined Students
- Good Placements

Industry

- Industry ready professionals with proper attitude
- Strong fundamentals
- Strong Industry- Institution interaction
- Collaborative research, consultancy
- Brand and accreditations of the Institute

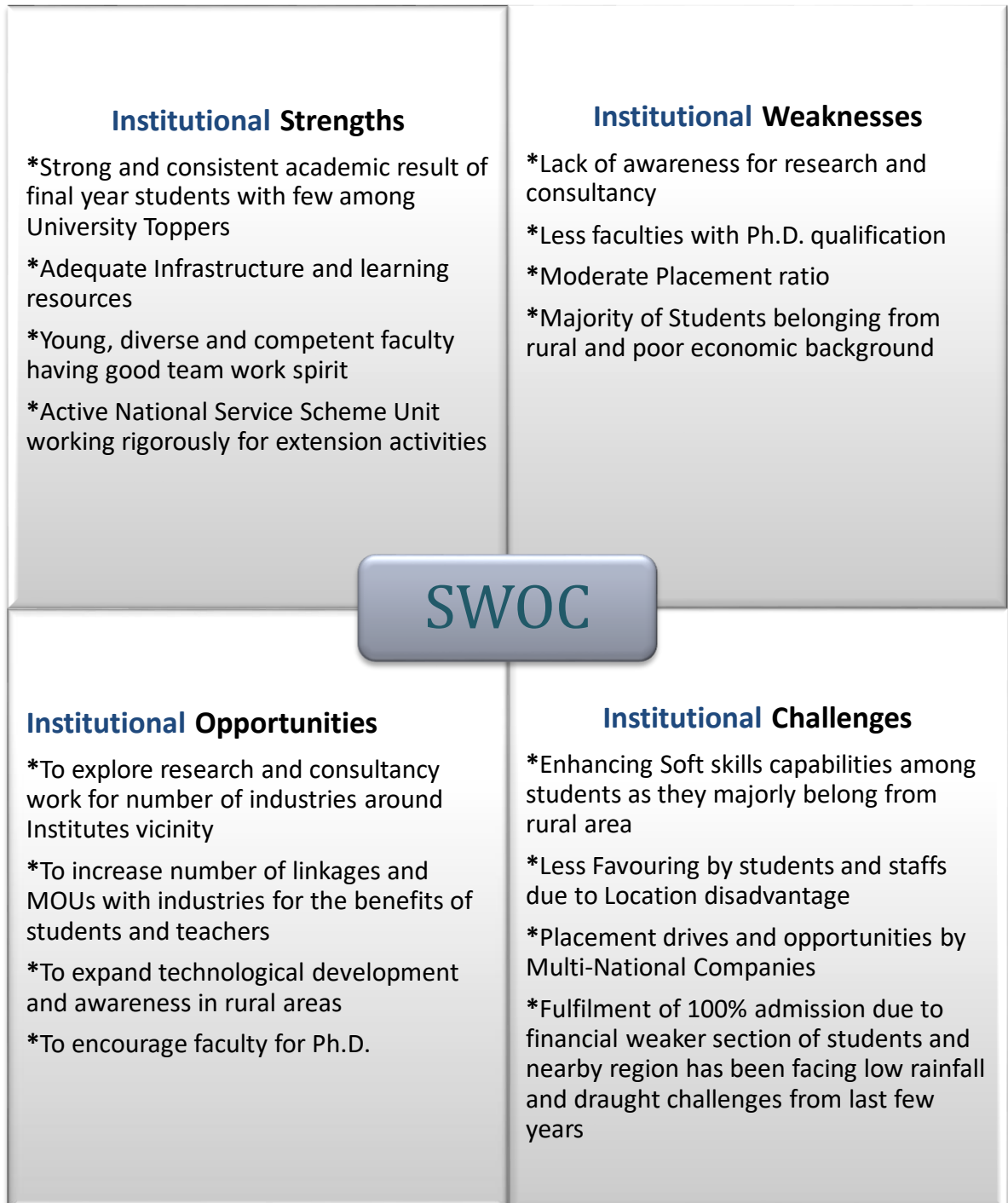
Society and Others

- Graduates with moral, ethical and Responsible Citizenship
- Social service activities by the Institution
- Skill development for needy
- Resource center for other Institutions
- Consultancy and Continuing education Programs

Environmental Scanning and Analysis

- **Economic Factors** are analysed, GDP is at 7.7 % for 2018, with new government in place. There are Huge opportunities may come up in terms of placement, Higher Education, research and innovation. This will have positive impact for the institutes providing quality education and research.
- **Social Factors** were analysed and the parent community and society are encouraging their wards and looking for placements but not on real education which will enhance knowledge. Placement should be one of the goals in students mind but not the only goal; this trend will bring down the curtains on innovation and entrepreneurship.
- **Technological Factors** were discussed and the extensive use of technology in teaching learning needs to be a key enabler in higher education. Emerging technologies and need for training faculty to face these challenges. E-learning /online learning/online examination may replace traditional class room teaching-learning practice. The faculty need to change their educational skills to match these challenges.
- **Political Factors** at the state & centre are not favouring faculty in research facilitation for those working in private institutions. Also there is no clarity on admission policy and fee structure from government which could be a challenge. National Skill Development is the need of the hour and funding with a specific focus on building skill record needs to be strategically planned.
- **Regulatory Factors** are of concern as MSS's CET is plagued by several unscheduled inspections, though MSS's CET is the most preferred institute and struggling hard to pursue accreditation. Entering of other technical Universities may pose a great challenge in the years to come in the form of competition.
- **Market /Competition Factors** are posing some challenges as many Deemed /Private state universities- Industry lead universities are getting started in many states. Infrastructure and funding may not be a differentiator any more. Quality teaching, research, ambience and placements could be critical factors. There needs to be a serious thought on incentives for performers, for this a consensus has to be arrived at. An internal IQAC will take care with external experts.

SWOC Analysis



Strategic Goals

MSS's CET Leadership Team after brain storming the vision, mission, quality policy, core values, environmental factors and SWOC analysis arrived at the step to establish High Level Goals (HLG) which are also called Institution Strategic Goals (ISG)



1. Good Governance

Governing Body	<ul style="list-style-type: none"> • Merit based GB appointment • Performance management of GB members through specific responsibilities • Evaluation of institutions performance and bench marking • Guiding and approving policy matters
Vision, Mission and Institution Goals	<ul style="list-style-type: none"> • Vision, Mission development & their articulation • Setting short term and long term goals • Institutional Strategic development plan • Institutional strategic goals setting
Transparency & Leadership	<ul style="list-style-type: none"> • Transparency in Leadership & appointment of Key positions • Service conduct rules and polices formulation, approval & implementation • Grievance Redressal mechanism • Leadership Development through decentralization • Establishing E-Governance- (Management Information System) MIS- Data analysis
Internal Quality Assurance Cell & Accreditation	<ul style="list-style-type: none"> • Setting up of IQAC with internal & external members to audit processes • Establishing internal audit committee for regulatory compliance • Systems, checks and balances- Remedial measures.
Students Participation	<ul style="list-style-type: none"> • Students nomination to Governing Body • Their suggestions in various academic and student affairs

2. University Status

Vision & Budget allocation	<ul style="list-style-type: none"> • Discussion in Governing Body and approval for University status • Resource planning & budget approval
Preparation of UDP & pre-assessment	<ul style="list-style-type: none"> • Constitution and appointment of committee to prepare University Development Plan (UDP) • Formation of Academic Council, BoS and Liaison officer...etc) • Preparation for pre-assessment & assessment
Accreditation & Certifications	<ul style="list-style-type: none"> • Accreditation & Assessment cell • Inspections preparation & Approvals
Statutory Inspections	<ul style="list-style-type: none"> • Statutory inspections planning and preparation • Inspections facilitation & remedial measures • Provisional university approval status

3. Leadership Development

Developing Ownership

- Motivating through interactions
- Partnership incentive plans

Assessment & Identification

- Expert committee to assess all existing leaders potential
- Find gaps and structure changing
- Identify positions for external

Decentralization

- Decentralize the academic, administration and student related
- Prescribe duties, responsibilities and accountability
- Rotation of key posts to build leadership

Development & Job Rotation

- Develop Leadership competencies
- Plan for Job rotation /enlargement /enrichment assignments
- Plan for new /crisis assignments

Retention Measures

- Growth retention plans through Career advancement.
- Golden handcuffs through (monetary /welfare)

4. Financial Management

Budgeting

- Department wise Budget planning of all heads of department
- Forecast & estimation of revenue
- Forecast & estimation of expenditure
- Emergency plans
- Budget formulation & approval through LGC

Financial Governance

- Planned expenditure management
- Procurement and Financial policies implementation
- Quarterly Audit and checks- balances
- Support through research, consultancy and training

Outflow Management & Growth plans

- Monitoring expenses as per budget planning
- Predicting internal revenue generation
- Treasury (surplus funds) management
- Growth- Expansion plans

5. Physical infrastructure

Green Campus (Keeping with the Vision & Mission)

- Plantation, Rain water harvesting and green cover
- Energy harvesting & management
- Hygiene, solid waste management (zero plastic usage)
- Reuse of waste
- Efficient usage of recycled waste water from STP

Academic infrastructure

- Aesthetic Class rooms, Tutorials, Seminar halls
- State of the art Laboratory & equipment

Library

- Library infrastructure up gradation
- Functional Furniture and fittings for e-learning

Residential Township

- Staff quarters and township facilities
- Safety, Security management
- Water facility and health centre

Sports, Hostel & Canteen

- Developing sports (indoor/outdoor) facilities
- Hobby clubs, Canteen & community centre
- Additional Hostels facility for boys & Girls within the campus

6. Teaching- Learning Infrastructure

Smart Class rooms

- Smart boards
- Multi-room instructional facility
- Multi media and support equipment
- E-Learning facilities

Laboratory- R&D Equipment

- R&D Laboratory and its maintenance
- Simulators
- Industry equipment (centres of competence) for consultancy

Knowledge Engineering (KE) & Information and Communication Technology (ICT)

- Licensed softwares
- Hardware (Servers, Computers...etc)
- Pedagogy tools
- Online learning tools
- Evaluation & assessment tools
- Learning Management System
- ICT for 360 deg. Feedback.

Books and E-Learning

- Books, Journals, Periodicals, Magazines
- Online access to E-media
- Departmental library books

7. Library & Information Centre

Infrastructure enhancement

- Budget allocation
- Infrastructure (Buildings & Furniture)
- CCTV and Lockers facility

Removal of obsolescence in Books & Resources

- Books, journals procurement, storage and retrieval
- Resources automation & Access (24X 7)

Digital & E-Library

- Digitization of Library resources
- Establishing tie ups with e-libraries & online access

8. Attraction, strengthening and retention of Faculty

Talent Hiring & Retention policy

- Career advancement Schemes
- Scientific induction/ orientation of new talent
- Critical talent identification & retention measures
- Offers best career to faculty

UGC /AICTE Scales, Rewards & Recognitions

- Set attractive policies to maintain staff cadder ratio
- Additional cadres to be created for deserving staff
- Rewards – recognitions & incentives
- Welfare policy formulation & implementation

Conducive working environment

- Best work facilities and infrastructure
- Role & responsibilities clarity and empowerment
- Online access to Library- journals 24X7 hours
- Township /quarters facility

Career growth & Development

- Sponsorship/ Deputation, sabbaticals for higher education & Exchange programmes
- Sponsorship to participate in national /international conferences
- Deputation to premier national /international universities/industry

9. Teaching-Learning and Evaluation Process

<p>Bench mark with Premier institutes</p>	<ul style="list-style-type: none"> •Constitute academic teams and visit premier institutions •Customise & Implement best practices
<p>Curriculum Design & Lesson plan</p>	<ul style="list-style-type: none"> •Design curriculum as per all graduate attributes and expectations of stake holders •Develop lesson plan as per OBE & academic calendar •Develop e-learning content •Benchmark with industry requirements •Use of Learning Management System (LMS) to support students
<p>Training Needs Assessment (TNA) and upgrading faculty & staff competence</p>	<ul style="list-style-type: none"> •Conduct training need analysis every two years •Conduct / depute faculty and staff for competence development •Support paper publications and presentations •Provide opportunities for networking •Train faculty to use Learning Management System (LMS) effectively
<p>Knowledge Delivery & Outcome based education</p>	<ul style="list-style-type: none"> •Define outcomes of each teaching learning initiative •Continuous Assessment and evaluation to measure outcomes •Establish Research Culture •Access to online learning •Mentor on academic, career & higher educational opportunities
<p>Evaluation & Assessment</p>	<ul style="list-style-type: none"> •Create proper feedback system •Continuous progress assessment •Question bank development & Term end examinations •Credit transfers and performance development

10. Industry- Institute Relationships

Industry Data base & Intelligence

- Strengthen placement, training and industry institute interaction cell
- Identify branch wise preferred industries & companies
- Identification of potential areas of research
- MoUs & **Non-Disclosure Agreement (NDA)** with potential industries/companies
- Professional bodies membership

Leverage Industry Resources

- Invite industry experts for guest lecturers /talks/seminars
- Partner with industry for syllabus reviews/advisory roles
- Deputation of faculty to Industry on sabbatical
- Leverage for internships, research projects, consultancy & placements
- Scholarships

Leverage Institutional Resources for Industry

- Training and talks by faculty
- Consultancy and testing to industry
- Starting of training programs for industry personal
- Enrolling industry personnel for Ph.D.

Setting up Centres of Excellence

- Identify potential industries who can establish centres of excellence department wise
- Establish and operationalize centres of excellence
- Setting up of chairs in specific domains by industry

11. Research, Development and Innovation

R&D Infrastructure & Teams

- Enhancing R&D laboratories in all departments
- Modernisation and removal of obsolescence of laboratories
- Dedicated R&D facilitation & documentation centre
- Competent technical staff for R&D labs
- Start new Journals with scopus indexing.

Establishing Centres of competence

- Fund raising through Project proposals
- Apply for TEQIP/Government/ other funding
- Establishing centres of excellences
- Establishing Consultancy cell

MOU with premier institutes/ R&D labs

- MoUs with higher learning institutions in India & abroad.
- Collaborations with ICT, IISC, IITs, TIFR, ISRO, DRDO, NAL, HAL, BEL...etc
- Multi & inter disciplinary research and product development

Incubation Centre /Product Development

- Encourage “idea to product” pre-incubation activities
- Establishing incubation centres
- Focus on Product development
- Startup of maker Space (Fab Lab) – Product and development

Setting up of Patent cell

- Patent filing, Scaling up & commercialisation
- Strengthening of patent cell
- Appointment of search and Patent Attorney

12. Quality Assurance Systems

Establishing Quality Systems

- Setting up bench marks & system flow
- Quality Policy steering committee
- Publishing Quality system design & culture
- Educating & Training of all employees

Internal Quality Assurance & Assessment cell

- Setting up of IQAC team
- Periodic checks and guidance

Accreditation & Certifications

- Internalise the process based on
- Choose accreditation/certification agency
- Audit and certifications

Audit Internal Controls

- Establish audit process & audit teams
- Train internal auditor teams
- Audit and remedial measures

Continual improvement, Rewards & Recognitions

- Setting up of Quality assurance cell
- Identifying achievements & best practices
- Quality circle competitions & rewards
- Annual competitions

13. Entrepreneurship

Entrepreneurship Development (EDP) Cell

- Strengthening of dedicated EDP cell
- Budget /seed funding for funding initial projects
- Identification of emerging areas of entrepreneurship

Identification of students, mentors & Training

- Identify interested students for entrepreneurship
- Identify mentors from successful entrepreneurs from Alumni/others
- Formal training on entrepreneurship

Leverage Promotion agencies

- EDP agencies and networking
- Competitions participation
- Leverage for funding & support

Incubation & Pilot projects

- Establish incubation centre for prototypes
- Provide incubation support for students
- Incubation support for outside SMEs

14. Placements, Internships & Career Guidance

<p>Placement & Career guidance Department</p>	<ul style="list-style-type: none"> •Dedicated team •Modernisation of infrastructure (Video conferencing, interview & conference rooms) •Video recording of mock up interviews of students and feedback
<p>Industry MOUs- Intelligence</p>	<ul style="list-style-type: none"> •Data base of various potential industries/companies •MOU s and relationship management •Industry experts as resource persons
<p>Training & Development</p>	<ul style="list-style-type: none"> •Awareness programmes •Value added programmes (soft skills & domain expertise) •Competency enhancement centre
<p>Internships, Placement process & Success stories</p>	<ul style="list-style-type: none"> •Internships planning and execution •Placement process coordination •Success stories celebration- Brand building

15. Extra-Curricular and Co-curricular activities

<p>State of the art infrastructure</p>	<ul style="list-style-type: none"> •Budget allocation •Establish state of the art infrastructure (indoor/outdoor) •Formation of hobby clubs
<p>Coaching, training & competitions</p>	<ul style="list-style-type: none"> •Dedicated coaches /trainers recruitment •Regular training /coaching classes •Participation in tournaments/competitions •Hosting competitions/ tournaments
<p>Credit transfer, Rewards & Recognition</p>	<ul style="list-style-type: none"> •Admission priority for state/national achievers •Academic credits transfer •Attendance compensation •Reward & Recognise achievers

16. Alumni Interaction

Alumni Association

- Strengthen Alumni association and engagement
- Establish alumni association office on campus, engage students
- Data base updation and interactive alumni website
- Establish global chapters and networking

Relationships & Leveraging

- Regular interactions /invitations
- Recognise successful alumni
- Leverage for guest lecturers/internships/placements
- Academic advisors/ Board of governors

Endowments

- Explore Contributions / endowment partnering
- Brand ambassadors
- Sponsorships/scholarships

17. Community Service and Extension activities

Budget and Resources

- Budget from institution resources
- Budget from Faculty/students/Govt/other donors

Village adoption & Rural Projects

- Identify nearby villages for adoption
- Study rural projects and challenges
- Explore & provide support to the execution of projects

Vocational training

- Identify the job oriented courses as per local needs
- Provide vocational training at the institute
- Educational support to village students

Health and hygiene support

- Conducting health awareness camps
- Arrenging free medicines to the needy
- Psychological and psychiatric support

18. Global Initiatives

New Campuses / Programs

- MoUs with the Institutions of various countries
- Twinning programmes with leading universities of various countries

Foreign Students

- Attracting foreign students under Student Exchange Programs (SEP)
- Twinning programmes with foreign students

MoUs with Foreign Governments/ Institutions

- Identify foreign higher level learning institutions
- MOUs with potential partner institutions
- MOUs with governments for education & projects

Strategy Implementation and Monitoring

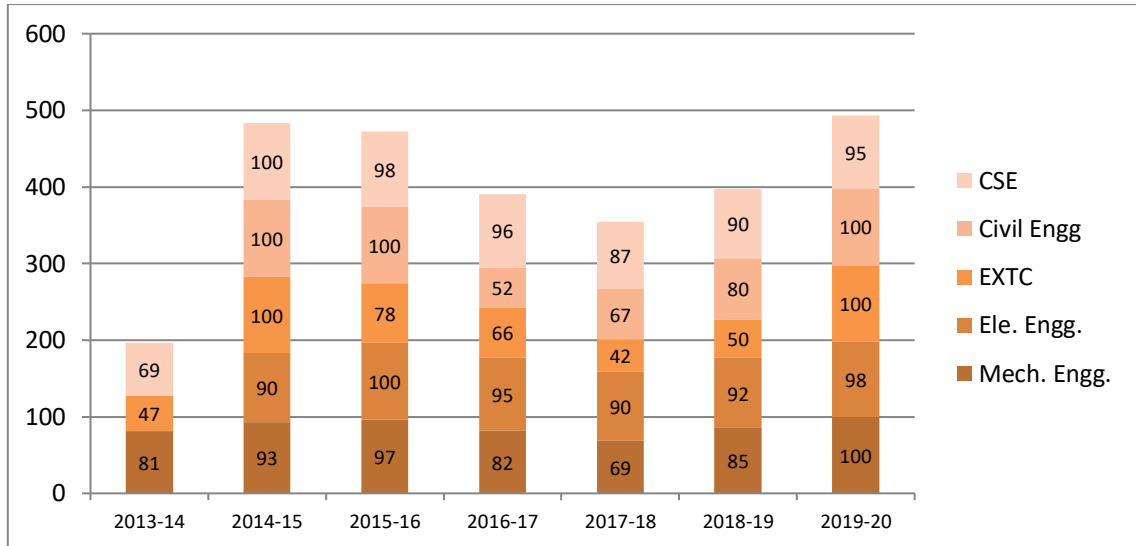
Strategic development plan once approved by Governing Body the next immediate step is its implementation in true spirit. Strategy when being implemented, the progress shall be measured from time to time through the IQAC. SMART (Specific, Measurable, Attainable, Realistic and Time bound) concept is made use of while arriving at implementation plans. All the measures of success are clearly spelt out in the implementation document and Head of the institution along with leadership team is the custodian for implementation and its success.

Implementation Plan at Institution Level

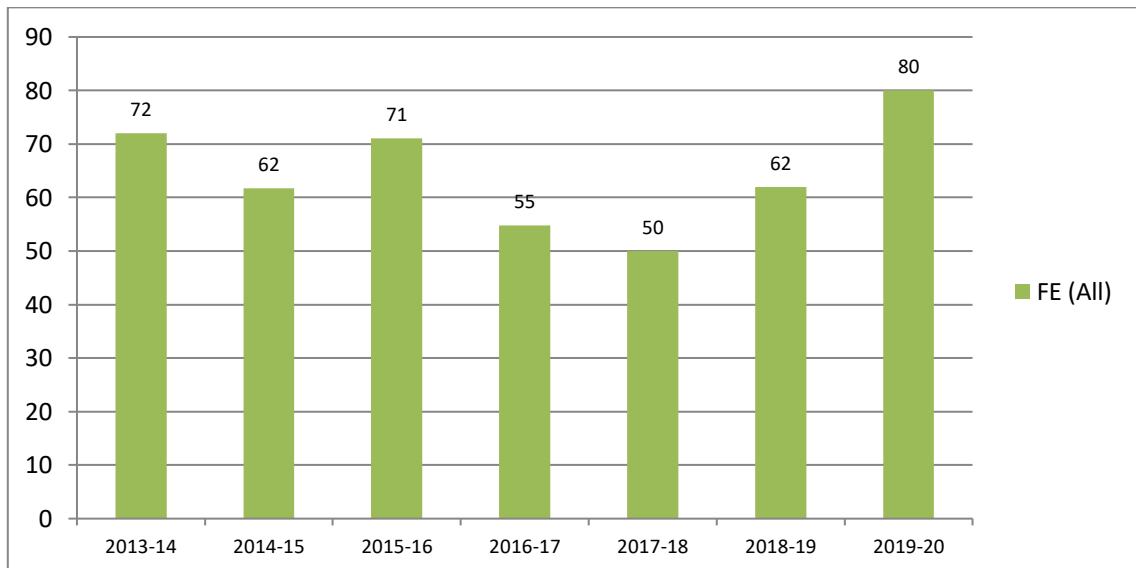
Good Governance & Administration	GB, Members of GB
Finance Management	Budget Committee, LGC and CDC
Institution Statutory Compliance	Principal, Vice-Principal, HOD's, OS and Coordinators
Branding /Expansion	GB members, Leadership team & Public relations team
University Status	GB / Special Committee
Talent Management	GB and Principal
Infrastructure (physical)	GB, HOD (Civil Engg.) & team
Infrastructure-Academics	Principal, Vice-Principal, HODs and Faculties
Teaching- Learning	Principal, Vice-Principal, HODs, Faculty and Staff
Research	R&D Coordinator
Student affairs	Student affairs Coordinator
Student admissions	Admissions Coordinator, Principal, Vice-Principal and HODs
Departmental activities	HODs and Faculty
Placement & Training	Training & Placement Officer and HoDs

Measurable during Implementation

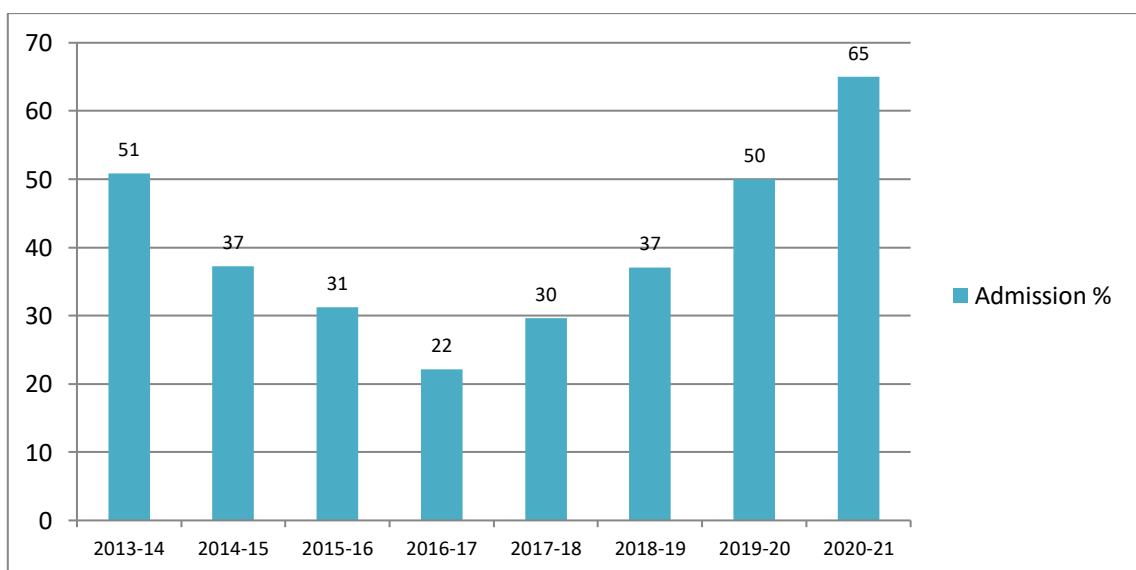
Good Governance	<ul style="list-style-type: none"> •GB selection, appointment, functioning, good governance initiatives, Management commitment, Vision-Mission reviews, Number of meetings conducted, decisions made, Committees appointment, performance , Polices implementation, grievance procedures, Educational ERP implementation.....etc.
Talent Management	<ul style="list-style-type: none"> •Recruitment, Selection of faculty, staff, salary, attrition rate, benefits as per UGC/AICTE norms, Track Faculty and staff performance.
Student Intake Quality	<ul style="list-style-type: none"> •CET ranking, Students profile, PUC marks score
Student Academic Performance	<ul style="list-style-type: none"> •Pass percentage, number of distinctions & first classes, Graduate attribute attainment levels and alumni feedback.
Placement	<ul style="list-style-type: none"> •Number of offers made through placement department, average salaries offered, Companies visiting the campus, Number of graduates pursuing higher education, number of students becoming eligible for higher education through GRE/GATE/CAT/GMAT...etc, Public sector and other Government jobs, percentage of graduates becoming Entrepreneurs.
Inplant Training and Sponsored Projects	<ul style="list-style-type: none"> •Students going for Inplant Training and increase in sponsored projects
Curriculum	<ul style="list-style-type: none"> •Curriculum review & design, Industry partnerships, Faculty training on new areas, Introduction of new courses, new add-on courses/ electives offered in emerging areas.
Alumni	<ul style="list-style-type: none"> •Alumni data base, number of interactions, support for internships, placements, projects, scholarships, consultancy and contribution towards infrastructure development.
Research and Consultancy	<ul style="list-style-type: none"> •Publications in national/international journals and conference proceedings, Patents filed, conferences & workshops organised, New MOUs signed with academic and industrial organizations, Centres of competence established.
Physical Infrastructure and Green Initiatives	<ul style="list-style-type: none"> •Number of buildings, class rooms added, removal of obsolescence, equipment added, annual budget allocated & utilized. Increase in green initiatives such as increase in social activities, tree plantation and conservation, incrsase the capacity of solar panels, increase in bird feeders and houses, etc
Social Responsibility	<ul style="list-style-type: none"> •Number of villages adopted through NSS activities, vocational trainings provided, social projects undertaken and skill development programs for marginal section of the society.
Extra Curricular Activities	<ul style="list-style-type: none"> •Number of student participants, number of tournaments won, number of sports and Techno-cultural events organized, Regional, National & International recognitions received, competitions participated.
Sources of Funding	<ul style="list-style-type: none"> •Students – Tuition Fees, Government reimbursements, Government grants, Industry Sponsorships for intercollegiate events, Funding raised through sponsored Projects, Consultancy /Testing, Services, International grants, Alumni Contribution, Trust Fund income.



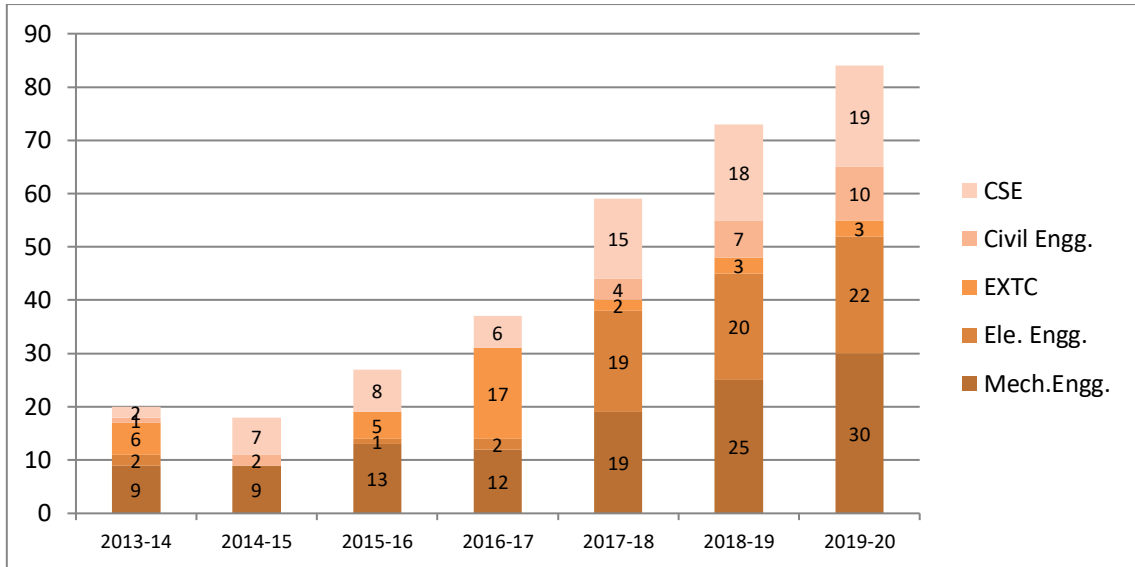
BE Result analysis



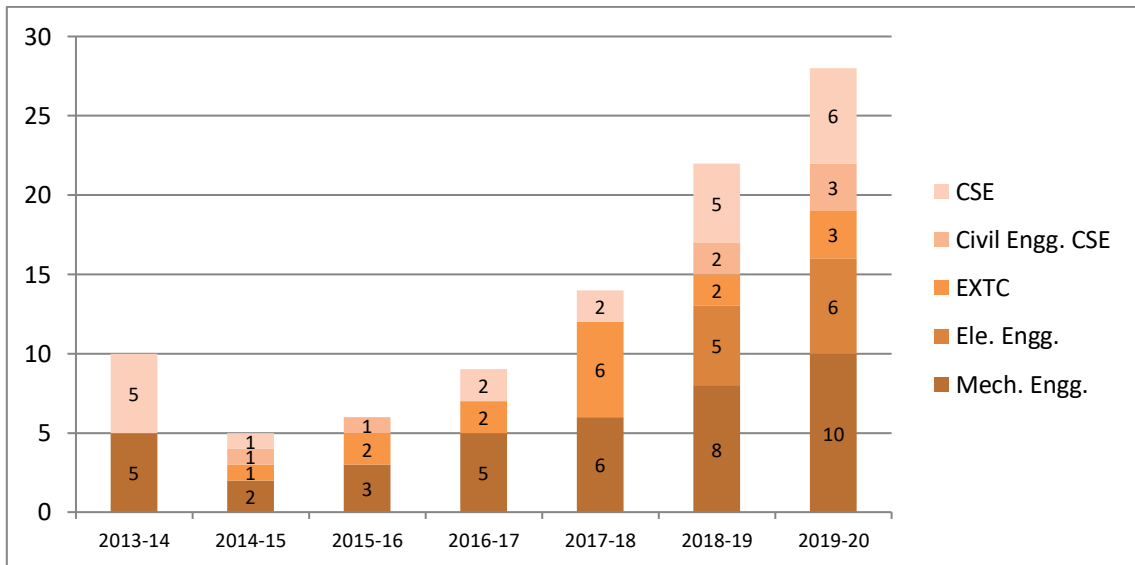
FE (all) Result analysis



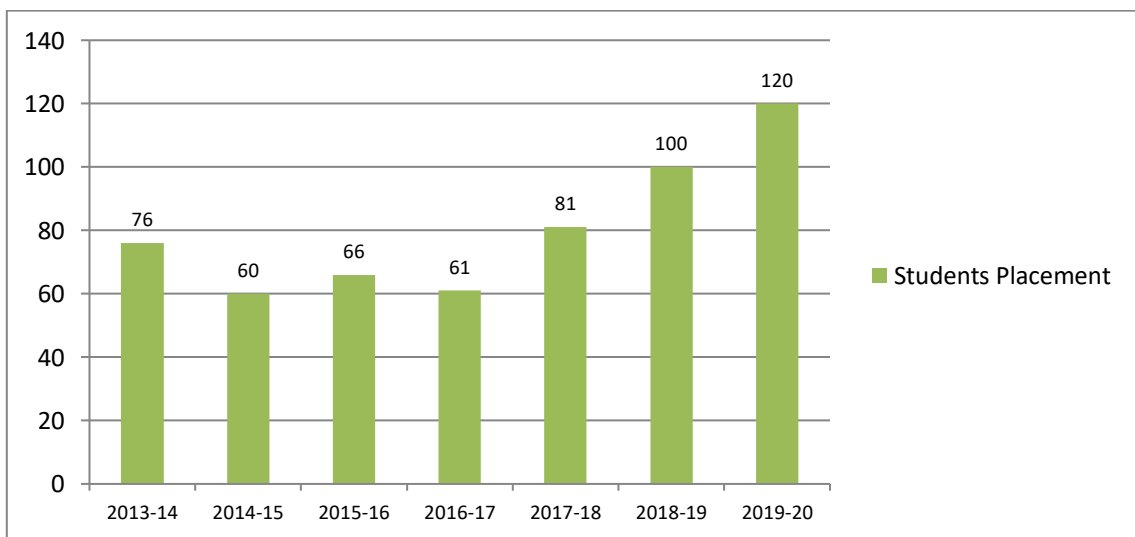
First year Admissions Percentage



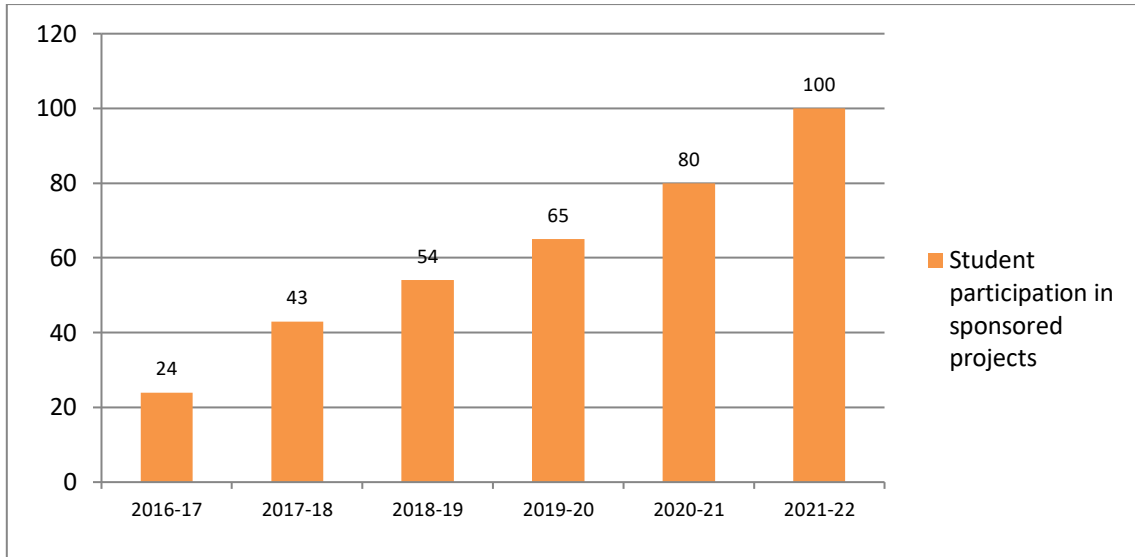
Research Paper publications by faculties in International/ National Journals



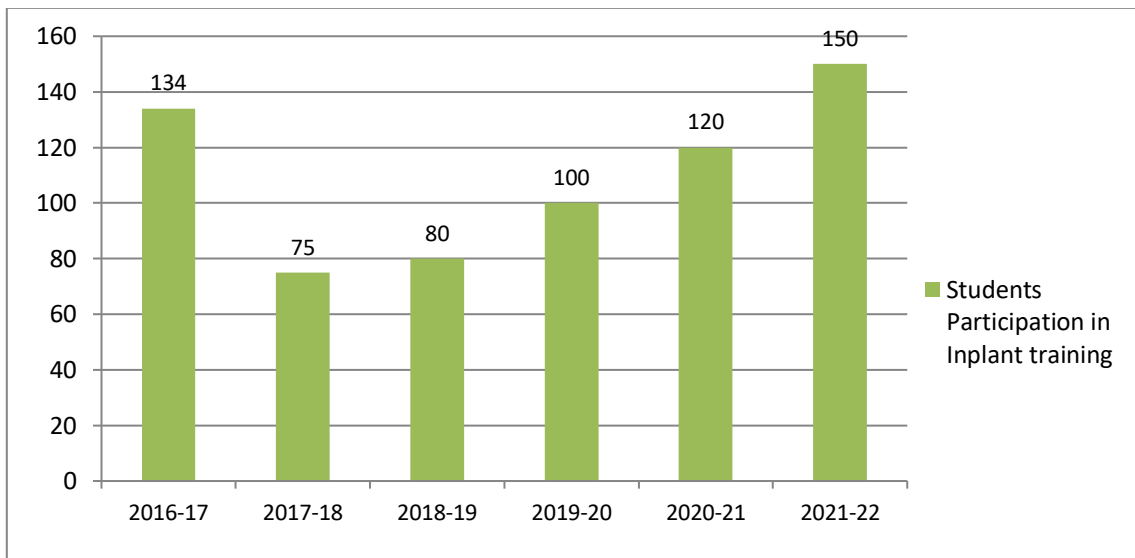
Research Paper Presentations by faculties in International/ National Conferences



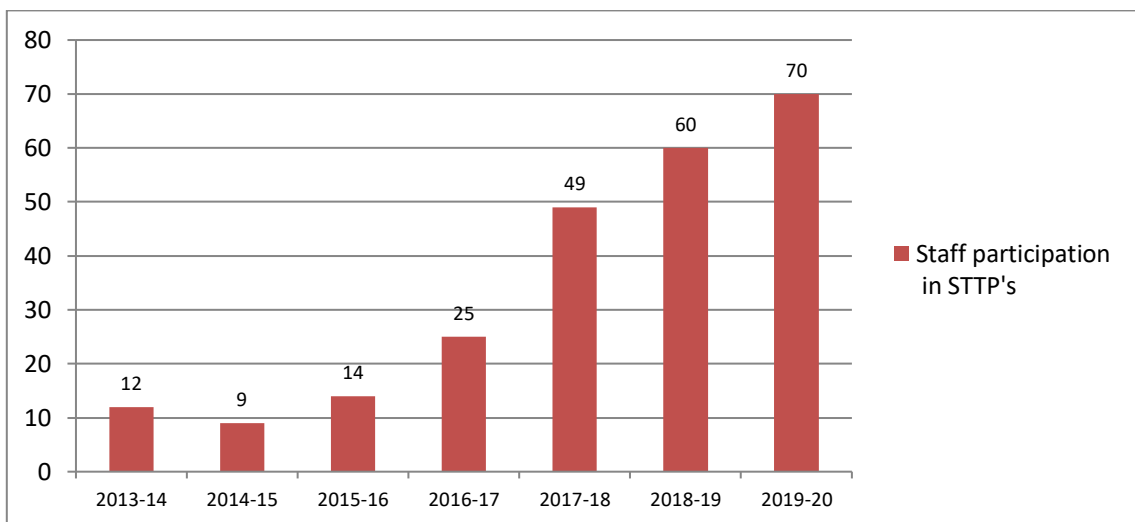
Student Placement in various companies



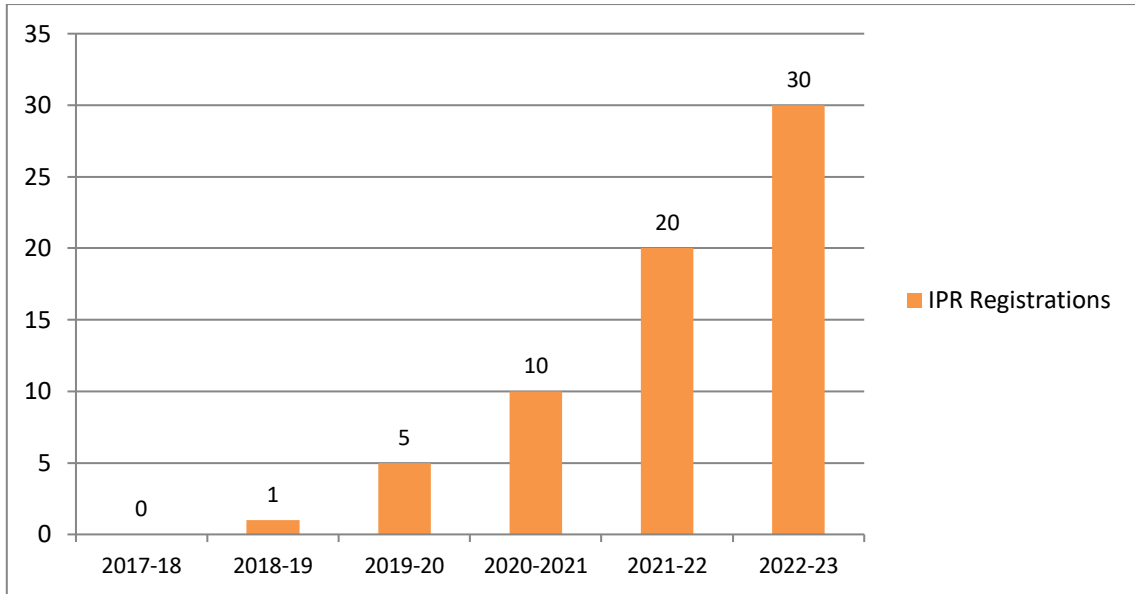
Student's involvement in sponsored Industrial Projects



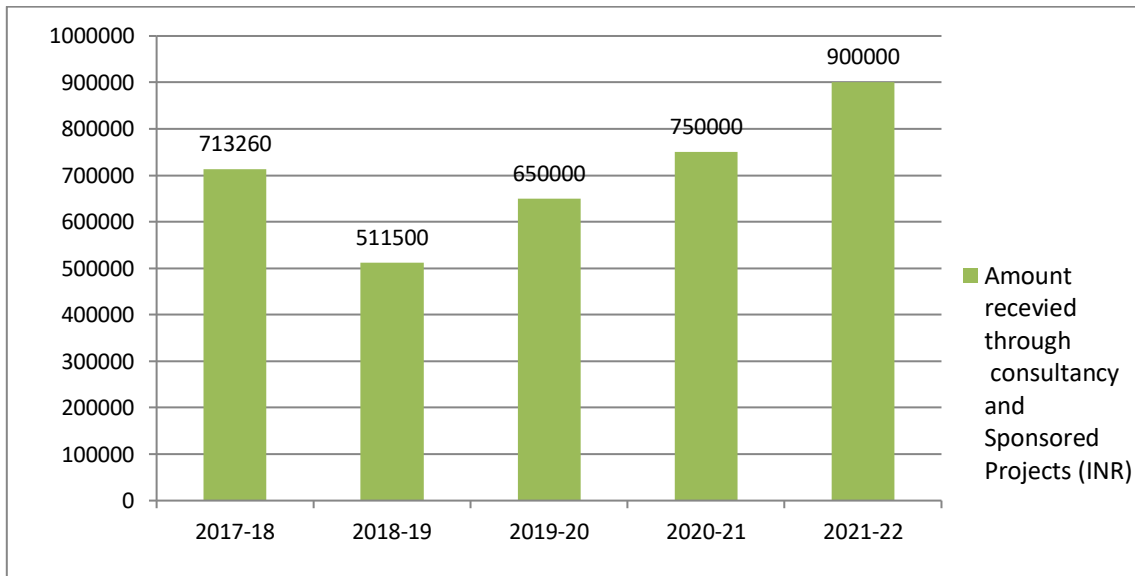
In-plant training by Students



Faculty's participation in STTP's/ NPTEL



IPR Registrations



Amount received through consultancy and sponsored projects

Conclusion

MSS's CET was started with humble beginnings in 2002 and completed 16 years successfully. The Institute has progressively grown and achieved many mile stones. The Institute has done very well in placements in spite of the economic recession for the last 05 years. The Institute is affiliated to Dr.Babasaheb Ambedkar Marathwada University, Aurangabad and is always following raising syllabus as per current Industrial requirements.

The Strategic Development Plan (SDP) is an outcome of Management Commitment, Institute Leadership Commitment and Steering Committee's detailed deliberations with all the stake holders. This collective wisdom ensures participation, ownership of the plan among all the stake holders. The Institutional strategic goals have strategies; Strategies have sub strategies with detailed Implementation plan to ensure success and sustainability over a period of time. The execution and operational implementation is monitored by stringent evaluation standards and speaks the quality of the strategy itself. The caveat is Strategy itself can do nothing but its implementation holds the key. The strategy is not static document but dynamic due to continuous changing environment and it is an ongoing process to evolve as per the necessity.

Dr.S.K. Biradar
Principal