



Vasavi College of Engineering (Autonomous)

**(Sponsored by VASAVI ACADEMY OF EDUCATION) (Affiliated to
Osmania University, Hyderabad, Approved by A.I.C.T.E.)**

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Strategic Plan 2021-2025



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SWOC ANALYSIS

STRENGTHS:

- Focused Vision & Mission.
- Well-developed infrastructure.
- Qualified and experienced faculty & staff.
- Quality of students admitted.
- Good academic culture, ambience and working environment leading to high students and faculty satisfaction.
- Management supports faculty qualifications upgradation and good academic practices.
- The administrative and management policies & controls are well established and operate effectively. Standard procedures, policies and practices are in place.
- Campus placements are strong and career counselling for students is well organized and structured.
- Students are given awards and rewards for merit achievement.
- Mentoring system with regular monitoring of attendance of students and their performance in examinations.
- Reputation and prestige of the college is rated high by students for its overall training, holistic development and academic results & placements.
- Institute location-accessible to all the Stakeholders.

WEAKNESSES:

- **Less number of publications by the faculty in refereed journals.**
- Less number of faculty with Ph.D.
- **Limited research funding to the faculty from various government agencies.**
- No comprehensive Academic EFP System. (Now under progress)
- **Less number of MoUs with industries / R & D organizations.**
- **Low** Industry-Institute interaction.

OPPORTUNITIES:

- Autonomy would enable to address the limitations under affiliation system.
- Leveraging locational advantage to network with institutes of higher learning, industry and research organizations for consultancy, collaborative R & D Projects, sponsored research, academic interaction, student internships etc.
- Use of alumni-base for institutional growth.
- More research funding opportunities.
- Ph.D Programmes offered by nearby public and private universities.
- Availability of plenty of on-line teaching resources to the students & faculty.
- Emergence of newer on-line assessment & evaluation methods.

CHALLENGES:

- Establishment of Higher Educational Institutions, Private and Deemed Universities can cause unequal competition.
- Quality of student intake in certain departments due to change in preferences.
- Change in mindset towards R&D.
- Presence of mediocre journal publishers.
- Tough competition in research funding opportunities.
- Availability of quality faculty interested in teaching.
- As tuition fee is regulated, resource-base could be affected.



VISION

“Striving for a symbiosis of technological excellence and human values.”

MISSION

“To arm young brains with competitive technology and nurture holistic development of the individuals for a better tomorrow.”

Targets & Strategies

Key Words@VISION

- Technological excellence
- Human values

Key Words@MISSION

- Competitive technology
- Holistic development
- Human Resources

Key Target Areas (KTAs) derived from Vision & Mission:

1. Facilitating high-quality knowledge.
2. Development of competencies and skills.
3. Enabling to handle the technological challenges.
4. Fostering human values and all-round development.
5. Training to excel as practitioners and entrepreneurs.

TARGETS & STRATEGIES

Strategies to achieve Vision & Mission:

Strategy#1: To establish better academic practices and procedures.

Strategy#2: To be a choice for good quality students and competent faculty.

Strategy#3: To produce technically competent and ethically strong graduates.

Strategy#4: To encourage Research & Consultancy.

Strategy#5: To develop a smart campus.

Strategy#1: To establish better academic practices and procedures.

1.1 Revision of curriculum & academic regulations:

- Introduction of more lab courses.
- Offering Lab courses in online mode using different Virtual Lab Platforms.
- Introduction of new professional electives in the emerging areas.
- Introduction of new inter-disciplinary open electives.
- Introduction of industry supported electives.
- Online courses by the students & faculty through different MOOCs platforms like Coursera, edX etc. Greater use of MIT-Open CourseWare
- Improving the quality of Mini Projects and Theme Based Projects for participating in the prestigious competitions conducted by IITs/NITs etc.
- Enhancing the Industry internships.
- Revision in Skill Development Courses meeting the recruitment requirements.
- Introduction of courses on life skills.
- Emphasis to promote entrepreneurial skills and to enhance the student participation in the related activities.
- Introduction of course on "Design Thinking".

1.2 Revision of examination regulations & procedures:

- More emphasis on continuous learning and assessment.
- Improvement of Bloom's Taxonomy Levels in learning and assessment.
- Examination reforms.
- Early declaration of results on completion of exams.

1.3 Introduction of best practices:

- Improving course delivery to meet learning & assessment as per Bloom's Taxonomy levels.
- Strengthen the Outcome Based Education (OBE).

1.4 MoUs with industries and research institutions for:

- Consultancy.
- Research.
- Faculty training.
- Training of Industry personnel.

1.5 Self and Collaborative Learning Initiatives:

- Online certification courses – through other MOOCs Platforms like Coursera, edX etc.
- Peer Group Learning.
- Group assignments and activities

1.6 Performance Appraisal System:

- A comprehensive Performance Appraisal System/Mechanism.

Strategy#2 : To be a choice for good quality students and competent faculty.

Students :

- Continue to support Socio-economic backward students under Equity Action Plan to provide them equal opportunities for learning and employability.

2.1 Continuation of academic scholarships for best performers from 1st year onwards.

2.2 Introduction of cash incentives for best GATE scores, Merit in MOOCs Courses.

2.3 Increasing the "Branding":

- Informative Brochure.
- More informative/interactive Website.

Faculty :

2.4 "Awards" to faculty for overall contribution.

2.5 Recruitment of competent faculty from institutions of repute.

Other Stakeholders:

2.6 Strengthening of IQAC review & monitor activities of the campus.

2.7 Obtaining NAAC accreditation.

Strategy#3: To produce technically competent and ethically strong graduates.

3.1 Strengthening of Professional Societies and club activities.

3.2 Strengthening of Skill Development Courses offered from 2nd year onwards.

3.3 Strengthening of courses on life skills.

3.4 Encourage students to participate in Games, Sports and cultural activities.

3.5 Strengthening of courses to promote entrepreneurial skills.

3.6 Strengthening of Technical Skills training from 5th Semester.

3.6 Introduction of "Student Portfolio" and "ELITE" score cards.

3.7 Introduction of industry-oriented Add-on courses.

3.8 Encourage participation of students in voluntary and extension activities.

Strategy#4: To encourage Research &

Consultancy.

4.1 Constitution of Research Advisory Board with external resource persons.

4.2 Monitoring the progress of the faculty pursuing Doctoral programme.

4.3 Training programmes on writing research papers.

4.4 Awareness programmes on funding agencies.

4.5 Training programmes on writing proposals.

4.6 Encourage faculty to publish papers.

4.7 Encourage faculty having Ph.D to submit project proposals for funding.

4.8 Financial support for research publications.

4.9 Establish Centres of Excellence with industry collaboration.

4.10 Accelerating the research through Research Groups.

Strategy#5: To develop a smart campus.

5.1 Comprehensive ERP System which is under development.

5.2 Provision of more no. of Wi-Fi Hotspots.

5.3 Increasing the scope of Campus surveillance System.

5.4 Enhancement of Energy conservation system.

TARGETS

Targets against the deliverable

Deliverables	The data of 2019-2020 as Baseline	Targets to be achieved during the period 2020-2025	
		At the end of 2 years	By end of 2024-25
Transition rate from 1st to 2nd year for the following:			
All students	84.85%	86%	88%
Campus Placements of students (%)			
All students	82%	83%	85%

Targets against the deliverable

Deliverables	The data of 2015-2020 as Baseline	At the end of 2 years	By end of 2024-25
Percentage of faculty having			
a) Masters Degree	63.92	60	55
b) Doctorate Degree in Engineering disciplines	36.07	40	45
Faculty with Only Masters' Degree and acquired Ph.D. in service	18	25	35
Number of publications in refereed journals			
a) National	30	20	50
b) International	286	200	500
Number of collaborative Programmes with Industry	19	25	30

Targets against the deliverable

Deliverables	The data of 2015-2020 as Baseline	At the end of 2 years	By end of 2024-25
a) Total revenue from externally funded R & D Projects (in Rs.)	3,81,35,314	2,00,00,000	5,00,00,000
b) Consultancy (in Rs.)	43,64,166	20,00,000	50,00,000
Accreditation status (obtained and applied for)	For all UG Programmes up to June, 2021 and only PG-Mechanical Programme upto June, 2021	For all UG Programmes and two PG Programmes	For all UG Programmes and three PG Programmes
NIRF	187	Below 150	Below 120

Targets against the deliverables

Deliverables	Baseline as per Strategic Plan: 2015 to 2020	At the end of 2 years		By end of 2024-25
		Target	Achieved	
Transition rate of students from 1 st to 2 nd year	84.85%	86%	-*	88%
Campus Placements of Students	82%	83%	93%	85%

* Due to COVID, Osmania University relaxed the rules of promotion and promoted the students. Hence the value has not been given to avoid deviation from regular method of calculation.

Targets against the deliverables

Deliverables	Baseline as per Strategic Plan: 2015 to 2020	At the end of 2 years		By end of 2024-2025
		Target	Achieved	
Faculty having Doctorate Degree	36%	45%	41.31%	55%
Faculty with Masters' Degree and acquire Ph.D. in service	18%	25%	20.95%	35%
No. of publications in refereed journals	300	200	253	500
No. of collaborative Programmes with Industry	19	25	22	30
Total Revenue from externally funded R&D projects (In Rs.)	3,81,35,314	2,00,00,000	1,00,85,054	5,00,00,000
Consultancy (In Rs.)	43,64,166	25,00,000	9,95,700	60,00,000
Accreditation status (obtained and applied for)	All UG Programmes upto June 2021 and only PG-Mechanical Programme upto June 2021	All UG Programmes and two PG-Programmes	Five UG Programmes	All UG Programmes and three PG-Programmes
NIRF	[201-250]	Below 200	[251-300]	Below 150
Implementation of some of the components of the National Education Policy (NEP) -2020 which are applicable for Autonomous Colleges with the approval of the Board of Governors and other statutory Bodies .				

Future Plans (Target year : 2030)

Students

- ❑ Enhance the campus placements in Core & Product Companies.
- ❑ Strengthen the start-up eco-system.

Academic

- ❖ Offer more Minor Programmes
- ❖ Introduce Honours Programmes to Civil Engineering, CSE, EEE students in emerging Technologies.

Faculty

- ✦ Implementation of Comprehensive Faculty annual Appraisal System
- ✦ Enhance number of faculty with Ph.D qualifications up to 75%.

Infrastructure

- Establish Student Activity Centre.
- Construct Indoor Sports Complex.
- Develop a more comprehensive Academic ERP System.

Teaching-Learning

- Institutionalize newer pedagogical methods like Flipped Classrooms & Process Oriented Group Inclusive Learning (POGIL).
- Strengthen Tutorial System.

Research & Development

- Improve number of publications in Q1 & Q2 Journals from the existing 25% to 50%.
- Establish a Collaborative Research Centers with an Industry in at least two Departments.
- Enhance the funding from external agencies up to Rs.10.00 Crores