

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(UGC- AUTONOMOUS INSTITUTE - AFFILIATED TO JNTUA)

MADANAPALLE – 517325

STRATEGIC PLAN IMPLEMENTATION (AY 2022-23 Gap Analysis Report)



Prepared By

Internal Quality Assurance Cell (IQAC)

Key Information for Gap Analysis Report:**Leitmotif 1:** Teaching, Learning Process, and Assessments**Leitmotif 2:** Skill Development, Social Responsibility, and Entrepreneurship**Leitmotif 3:** Research, Innovation, Consultancy, and Higher Education**Gap Analysis Report Summary****📌 Leitmotif 1: Teaching, Learning Process, and Assessments**

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
1.1	1.1.1.2	Curriculum Revision	No. of DAB, IAAB, BoS, PAC Meetings	30	32	107	-7
1.1	1.1.2.1	Interdisciplinary Courses	No. of courses offered	44	48	109	-9
1.1	1.1.2.2	Placed Students	No. of students who are placed in reputed Multi-National Companies.	1065	780	73	27
1.1	1.1.4.1	Ph.D. Faculty Appointed	No. of Ph.D. qualified faculty	146	148	101	-1
1.1	1.1.4.2		% of Faculty with Ph.D	57	49	86	14
1.1	1.1.4.4	Adjunct Faculty	No of Visiting/ Adjunct Faculty	14	16	114	-14
1.1	1.1.5.1	ICT enabled Classroom	No of ICT enabled Classroom	96	103	107	-7
1.1	1.1.5.2	Books in Central Library	Number of volumes of books, journals and periodicals in the Central/Dept. library	15867	62487	394	-294
1.2	1.2.1.1	Lab Courses for Self-learning	No. of lab courses	111	114	103	-3

1.2	1.2.1.2	Internships for Practice Learning	No. of internships	1784	2091	117	-17
1.2	1.2.1.3	Industry Projects	No of Industry Projects	441	221	50	50
1.2	1.2.2.1	MOOC Courses	No of MOOC Courses	25	30	120	-20
1.2	1.2.2.2	Video Lectures	No of Students who accessed the video Lectures through NPTEL	3182	3469	109	-9
1.2	1.2.3.1	Webinars for Quality Enhancement	No. of webinars conducted	70	76	109	-9
1.2	1.2.3.2		Number of students benefitted.	5504	3398	62	38
1.2	1.2.4.1	Student Research Projects	Number of students benefitted in Student Research Projects	641	767	120	-20
1.2	1.2.4.2	Smart India Hackathon Participation	No. of participants	128	162	127	-27
1.2	1.2.4.3	Mini & Major Projects	Students working as teams in Mini and Major projects	1069	871	81	19
1.2	1.2.4.4	Seed Money	No. of students who received Seed Money for Projects	12	0	0	0
1.2	1.2.4.5	Students exchanged for Research with Foreign/Domestic Universities	No. of students exchanged for Research with Foreign/Domestic Universities	10	0	0	100
1.2	1.2.4.6		No. of Student Presentations	721	357	50	50
1.2	1.2.4.7	Student Research Projects	No. of Student Publications	100	103	103	-3

1.2	1.2.4.8	Student Grants	Amount of Student grants received	150002	0	0	0
1.2	1.2.5.1		Number of students benefitted through e- learning platform.	4170	5882	141	-41
1.2	1.2.6.1	Intra & Inter Events	Number of students participated in intra and inter college events like seminars, symposiums, workshops, cultural programmes, sports etc. No. of Idea Weeks organised	2000	2106	105	-5
1.3	1.3.2.1	Students with Good CGPA (>8.5)	No. of students securing good CGPA	805	999	124	-24
1.3	1.3.2.2	Rating of Faculty	Rating of the faculty at different levels by periodic feedback from students.	4	4.2	105	-5

🌀 Leitmotif 2: Skill Development, Social Responsibility, and Entrepreneurship

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
2.1	2.1.1.1	Training Programs	No. of training programs conducted	50	66	132	-32
2.1	2.1.1.2	Students placed in reputed organisations	Number of students placed in reputed organisations.(Core/Non-Core)	1301	1285	99	1
2.1	2.1.2.1	Skill Development	No. of students trained	1820	690	38	62
2.1	2.1.3.1	Workshops	Number of workshops conducted by	24	21	88	13

			experts from Industries				
2.1	2.1.3.2	Alumni Interactions	No. of Alumni interactions organised	29	14	48	52
2.1	2.1.3.3		Number of students benefitted.	1680	2185	130	-30
2.1	2.1.3.4	Industrial Visits	Number of Industrial visits arranged	26	26	100	0
2.1	2.1.3.5	Internships	Number of students who underwent internships	1599	2336	146	-46
2.1	2.1.4.1	Foreign Language Learning	No. of students learning foreign languages	10	7	70	30
2.1	2.1.4.2	Student Magazines	No. of student magazines published	9	5	56	44
2.1	2.1.4.3	Student Certifications	Number of students certified by the University of Cambridge	50	18	36	64
2.1	2.1.4.4		Number of students certified by the British Council	20	3	15	85
2.2	2.2.1.1	EPICS Projects	No. of projects benefitting society	102	72	71	29
2.2	2.2.2.1	MSR Club Activities	No. of activities conducted	59	33	56	44
2.2	2.2.2.2		Number of students actively involved	277	55	20	80
2.2	2.2.3.1	NSS Outreach Programs	No. of outreach programs conducted	20	36	180	80

2.2	2.2.3.2		Number of students actively involved	471	459	97	3
2.2	2.2.3.3	B & C Certificates	Number of people benefitted through social awareness activities. No. of B & C Certificates received	331	642	194	-94
2.2	2.2.4.1		Number of students who pursued.	200	205	103	-2
2.2	2.2.5.1	Villages surveyed	Number of villages surveyed in and around Madanapalle	55	48	87	13
2.2	2.3.1.1	ED Cell	Number of programmes conducted by ED Cell	25	13	52	48
2.3	2.3.1.2	Entrepreneurship Awareness	No. of students benefitted	1373	251	18	82
2.3	2.3.1.3		No. of students exposed to industry working environment through industry internship/ projects etc (Offline)	477	550	115	-15
2.3	2.3.1.4	Entrepreneurs	Number of Entrepreneurs	18	12	67	33
2.3	2.3.2.1	Financial Support to Entrepreneurs	No. of beneficiaries	16	0	0%	100
2.3	2.3.3.1	Start-ups through Incubation	No. of start-ups	10	0	0%	100
2.3	2.3.3.2		Number of people employed in the start- ups	61	0	0	100

🎯 Leitmotif 3: Research, Innovation, Consultancy, and Higher Education

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
3.1	3.1.1.1	Research Centres under JNTUA	No. of Research Centres	3	1	33	67
3.1	3.1.2.1	Publications in SCI/Scopus	No. of Publications	215	188	87	13
3.1	3.1.2.2		Number of projects sanctioned from funding agencies.	13	5	38	62
3.1	3.1.2.3		Incentives provided by the management to the faculty for publications & projects	110013	500008	454	-354
3.1	3.1.2.4	Patents Filed	No. of patents filed	36	32	89	11
3.1	3.1.3.1	Establishment of Industry-Supported Labs	No. of labs/centres of excellence	29	59	203%	-103
3.1	3.1.3.2	collaborative projects	Number of collaborative projects	8	1	13	88
3.1	3.1.3.3	Industry Experts	Number of industry experts involved	812	803	99	1
3.1	3.1.3.4	skill development certifications	No. of students with skill development certifications from Industry/Research Labs	100	140	140	-40
3.2	3.2.1.1	Consultancy activities	Number of consultancy activities undertaken	50	179	358	-258
3.2	3.2.1.2	Consultancy Revenue	Amount of revenue generated	1790001	1060121	59%	41%
3.2	3.2.1.3		Number of consultancy activities undertaken	26	34	131	-31
3.3	3.3.1.1	Higher Education Admission	No. of students admitted to prestigious institutions	107	132	123%	-23%

3.3	3.3.2.1		Number of MOUs signed	25	3	12	88
3.3	3.3.2.2	Students who enrolled for internships/higher studies	Number of students who enrolled for internships/higher studies	1079	2025	188	-88
3.3	3.3.3.1		Number of beneficiaries	700	798	114	-14
3.3	3.3.4.1	GATE Coaching Hours	No. of GATE Coaching Hours conducted	315	232	74	26
3.3	3.3.4.2		Number of students attending GATE Coaching Classes	128	131	102	-2
3.3	3.3.4.3	GATE Qualified Students	No. of GATE qualified students	20	5	25	75
3.3	3.3.4.4	Assessment Tests	No. of assessment tests conducted for competitive exams	66	50	76	24

Major Gaps Identified & Corrective Actions:

1. Student Placement in Reputed MNCs

- **Target:** 1,065 students
- **Achieved:** 780 students
- **Achievement:** 73% (Gap: 27%)

Corrective Actions:

- **Strengthen Industry Partnerships:** Forge stronger ties with multinational companies to understand their recruitment needs and tailor student training accordingly.
- **Enhance Soft Skills Training:** Implement comprehensive programs focusing on communication, teamwork, and problem-solving skills.
- **Alumni Engagement:** Leverage alumni networks for mentorship and placement opportunities.

2. Faculty with Ph.D. Qualifications

- **Target:** 57%
- **Achieved:** 49%
- **Achievement:** 86% (Gap: 14%)

Corrective Actions:

- **Incentivize Higher Education:** Offer scholarships or financial incentives for current faculty to pursue doctoral studies.
- **Recruitment Drive:** Actively recruit Ph.D. holders by offering competitive packages and research opportunities.

3. Industry Projects

- **Target:** 441 projects
- **Achieved:** 221 projects
- **Achievement:** 50% (Gap: 50%)

Corrective Actions:

- **Collaborate with Industries:** Establish partnerships with industries to identify real-world problems for student projects.
- **Interdisciplinary Approach:** Encourage projects that span multiple disciplines to increase relevance and innovation.

4. Student Beneficiaries of Webinars

- **Target:** 5,504 students
- **Achieved:** 3,398 students
- **Achievement:** 62% (Gap: 38%)

Corrective Actions:

- **Increase Awareness:** Promote webinars through multiple channels to ensure maximum participation.
- **Feedback Mechanism:** Implement post-webinar surveys to understand student needs and improve future sessions.

5. Seed Money for Student Projects

- **Target:** 12 students
- **Achieved:** 0 students
- **Achievement:** 0% (Gap: 100%)

Corrective Actions:

- **Establish Funding Programs:** Create a fund dedicated to supporting student-led projects.
- **Application Process:** Develop a transparent and straightforward application process for students to access seed money.

6. Student Exchange for Research

- **Target:** 10 students
- **Achieved:** 0 students
- **Achievement:** 0% (Gap: 100%)

Corrective Actions:

- **Partnerships with Institutions:** Form collaborations with domestic and international universities for exchange programs.
- **Virtual Exchanges:** Incorporate virtual exchange programs to overcome geographical and financial barriers.

7. Student Presentations

- **Target:** 721 presentations
- **Achieved:** 357 presentations
- **Achievement:** 50% (Gap: 50%)

Corrective Actions:

- **Organize Conferences:** Host internal conferences and symposiums to provide platforms for student presentations.
- **Mentorship Programs:** Pair students with faculty mentors to guide them in preparing and delivering presentations.

8. Student Grants Received

- **Target:** ₹150,002
- **Achieved:** ₹0
- **Achievement:** 0% (Gap: 100%)

Corrective Actions:

- **Identify Funding Sources:** Research and compile a list of potential grant providers, including government and private organizations.
- **Grant Writing Workshops:** Conduct workshops to train students in writing effective grant proposals.

Action Points to Address Performance Gaps

1. Enhancing Student Placement in Reputed MNCs

- Strengthen partnerships with multinational companies to align student skill sets with industry requirements.
- Implement comprehensive soft skills and aptitude training programs.
- Leverage alumni networks to facilitate mentorship and placement opportunities.

2. Increasing Faculty with Ph.D. Qualifications

- Introduce incentives and support systems for current faculty pursuing doctoral studies.
- Initiate targeted recruitment drives to attract Ph.D. holders.

3. Expanding Industry Projects

- Establish collaborations with industries to identify real-world problems for student projects.
- Promote interdisciplinary projects that integrate multiple fields of study.

4. Boosting Student Participation in Webinars

- Launch awareness campaigns to promote upcoming webinars.
- Implement feedback mechanisms to improve webinar content and delivery.

5. Allocating Seed Money for Student Projects

- Create a dedicated fund to support student-led projects.
- Develop a transparent application and evaluation process for disbursing seed money.

6. Facilitating Student Exchange for Research

- Identify and establish partnerships with domestic and international institutions for student exchange programs.
- Initiate virtual exchange opportunities to overcome geographical and financial barriers.

7. Increasing Student Presentations

- Organize internal conferences and symposiums to provide platforms for student presentations.
- Implement mentorship programs to guide students in preparing and delivering presentations.

8. Securing Student Grants

- Research and compile a list of potential grant providers, including government and private organizations.
- Conduct workshops to train students in writing effective grant proposals.

Major Gaps and Corrective Actions:

Initiative	Gap %	Gap Description	Corrective Actions
1.1.2.2 – Placed Students	27%	Low placement in reputed MNCs (only 73% achieved)	<ul style="list-style-type: none">- Strengthen industry connect and campus branding- Conduct pre-placement training (soft skills, technical)- Increase internship-to-placement conversion efforts- Introduce mock interviews and resume clinics
1.1.4.2 – % of Faculty with Ph.D.	14%	Only 49% of faculty hold Ph.D. vs target of 57%	<ul style="list-style-type: none">- Support faculty to pursue part-time/full-time Ph.D.- Hire more Ph.D.-qualified faculty during recruitment- Promote FDPs and doctoral funding schemes
1.2.1.3 – Industry Projects	50%	Significant shortfall in industry-sponsored projects	<ul style="list-style-type: none">- Collaborate with industries through MoUs- Create an industry project cell with dedicated coordinators- Encourage joint proposals and consultancy-based projects

1.2.3.2 – Webinar Beneficiaries	38%	Limited student engagement in quality webinars	<ul style="list-style-type: none"> - Make webinar participation mandatory as part of course work - Promote through ERP/LMS systems with reminders - Track attendance and provide digital badges/certificates
1.2.4.4 – Seed Money for Projects	100%	No student received seed money	<ul style="list-style-type: none"> - Launch a structured 'Innovation Grant Scheme' - Allocate internal budget and define clear eligibility - Invite project proposals periodically and evaluate through expert panel
1.2.4.5 – Student Research Exchange	100%	No student participated in exchange programs	<ul style="list-style-type: none"> - Establish MoUs with partner institutions (domestic/foreign) - Publicize calls for research internships abroad (e.g., DAAD, MITACS) - Support with travel grants and application workshops
1.2.4.6 – Student Presentations	50%	Only 357 presentations vs 721 target	<ul style="list-style-type: none"> - Organize internal symposiums and incentivize external presentation - Assign faculty mentors to guide abstract/paper submissions
1.2.4.8 – Student Grants Received	100%	No student grant recorded	<ul style="list-style-type: none"> - Map grant opportunities (Govt. schemes, CSR, private orgs.) - Form a student research cell to assist with applications - Conduct grant writing workshops

General Institutional Recommendations

- Monitoring Dashboard: Implement a dynamic KPI tracking dashboard updated monthly.
- Mentor Involvement: Engage faculty mentors in placement preparation, research guidance, and opportunity mapping.
- Strategic Partnerships: Expand collaboration with industries and international universities for projects and exchanges.
- Resource Allocation: Allocate specific budget lines for student seed funding, research grants, and faculty qualification development.