MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(UGC- AUTONOMOUS INSTITUTE - AFFILIATED TO JNTUA)

MADANAPALLE – 517325

STRATEGIC PLAN IMPLEMENTATION
(AY 2023-24 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	38	38	0	0
1.1	1.1.2.1	Interdisciplinary Courses	No. of courses offered	121	96	79	21
1.1	1.1.2.2	Placed Students	No. of students who are placed in reputed Multi-National Companies.	1230	955	78	22
1.1	1.1.4.1	Ph.D. Faculty Appointed	No. of Ph.D. qualified faculty	141	146	104	-4
1.1	1.1.4.2		% of Faculty with Ph.D	58	52	90	10
1.1	1.1.4.4	Adjunct Faculty	No of Visiting/ Adjunct Faculty	24	7	29	71
1.1	1.1.5.1	ICT enabled Classroom	No of ICT enabled Classroom	92	107	116	-16
1.1	1.1.5.2	Books in Central Library	Number of volumes of books, journals and periodicals in the Central/Dept. library	16665	62788	377	-277
1.2	1.2.1.1	Lab Courses for Self-learning	No. of lab courses	147	136	93	7
1.2	1.2.1.2	Internships for Practice Learning	No. of internships	2789	4566	164	-64

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
1.2	1.2.1.3	Industry Projects	No of Industry Projects	475	173	36	64
1.2	1.2.2.1	MOOC Courses	No of MOOC Courses	53	60	113	-13
1.2	1.2.2.2	Video Lectures	No of Students who accessed the video Lectures through NPTEL	4158	5266	127	-27
1.2	1.2.3.1	Webinars for Quality Enhancement	No. of webinars conducted	106	68	64	36
1.2	1.2.3.2		Number of students benefitted.	6503	4350	67	33
1.2	1.2.4.1	Student Research Projects	Number of students benefitted in Student Research Projects	745	672	90	10
1.2	1.2.4.2	Smart India Hackathon Participation	No. of participants	279	180	65	35
1.2	1.2.4.3	Mini & Major Projects	Students working as teams in Mini and Major projects	1533	1172	76	24
1.2	1.2.4.4	Seed Money	No. of students who received Seed Money for Projects	31	0	0	100
1.2	1.2.4.5	Students exchanged for Research with Foreign/Domestic Universities	No. of students exchanged for Research with Foreign/Domestic Universities	24	17	71	29
1.2	1.2.4.6		No. of Student Presentations	745	918	123	-23
1.2	1.2.4.7	Student Research Projects	No. of Student Publications	150	162	108	-8
1.2	1.2.4.8	Student Grants	Amount of Student grants received	210011	4020000	1914	-1814

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
1.2	1.2.5.1		Number of students benefitted through e- learning platform.	4747	5335	112	-12
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	3000	2807	94	6
1.3	1.3.2.1	Students with Good CGPA (>8.5)	No. of students securing good CGPA	1140	1703	149	-49
1.3	1.3.2.2	Rating of Faculty	Rating of the faculty at different levels by periodic feedback from students.	5	4	80	20

🎯 **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	146	47	32	68
2.1	2.1.1.2	Students placed in reputed organisations	Number of students placed in reputed organisations.(Core/ Non-Core)	1529	1396	91	9
2.1	2.1.2.1	Skill Development	No. of students trained	2561	2108	82	18
2.1	2.1.3.1	Workshops	Number of workshops conducted by experts from Industries	48	24	50	50
2.1	2.1.3.2	Alumni Interactions	No. of Alumni interactions organised	42	36	86	14

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
2.1	2.1.3.3		Number of students benefitted.	2617	2685	103	-3
2.1	2.1.3.4	Industrial Visits	Number of Industrial visits arranged	34	22	65	35
2.1	2.1.3.5	Internships	Number of students who underwent internships	2931	3942	134	-34
2.1	2.1.4.1	Foreign Language Learning	No. of students learning foreign languages	15	11	73	27
2.1	2.1.4.2	Student Magazines	No. of student magazines published	13	18	138	-38
2.1	2.1.4.3	Student Certifications	Number of students certified by the University of Cambridge	89	9	10	90
2.1	2.1.4.4		Number of students certified by the British Council	34	5	15	85
2.2	2.2.1.1	EPICS Projects	No. of projects benefitting society	138	25	18	82
2.2	2.2.2.1	MSR Club Activities	No. of activities conducted	70	11	16	84
2.2	2.2.2.2		Number of students actively involved	398	554	139	-39
2.2	2.2.3.1	NSS Outreach Programs	No. of outreach programs conducted	36	12	33	67
2.2	2.2.3.2		Number of students actively involved	500	244	49	51
2.2	2.2.3.3	B & C Certificates	Number of people benefitted through social awareness activities. No. of B & C Certificates received	499	710	142	-42
2.2	2.2.4.1		Number of students who pursued.	220	201	91	9
2.2	2.2.5.1	Villages surveyed	Number of villages surveyed in and around Madanapalle	58	10	17	83
2.2	2.3.1.1	ED Cell	Number of programmes conducted by ED Cell	50	30	60	40
2.3	2.3.1.2	Entrepreneurship Awareness	No. of students benefitted	1669	699	42	58

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
2.3	2.3.1.3		No. of students exposed to industry working environment through industry internship/ projects etc (Offline)	452	994	220	-120
2.3	2.3.1.4	Entrepreneurs	Number of Entrepreneurs	37	15	41	59
2.3	2.3.2.1	Financial Support to Entrepreneurs	No. of beneficiaries	33	14	42	58
2.3	2.3.3.1	Start-ups through Incubation	No. of start-ups	15	6	40	60
2.3	2.3.3.2		Number of people employed in the start- ups	64	10	16	84

🎯 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	6	1	17	83
3.1	3.1.2.1	Publications in SCI/Scopus	No. of Publications	305	352	115	-15
3.1	3.1.2.2		Number of projects sanctioned from funding agencies.	17	16	94	6
3.1	3.1.2.3		Incentives provided by the management to the faculty for publications & projects	200046	770000	385	-285
3.1	3.1.2.4	Patents Filed	No. of patents filed	36	84	233	-133
3.1	3.1.3.1	Establishment of Industry- Supported Labs	No. of labs/centres of excellence	33	65	197	-97
3.1	3.1.3.2	collaborative projects	Number of collaborative projects	11	27	245	-145

Goal	Goal Code	Initiative	Metric	Target	Achieved	Achievement %	Gap %
3.1	3.1.3.3	Industry Experts	Number of industry experts involved	870	314	36	64
3.1	3.1.3.4	skill development certifications	No. of students with skill development certifications from Industry/Research Labs	100	599	599	-499
3.2	3.2.1.1	Consultancy activities	Number of consultancy activities undertaken	50	40	80	20
3.2	3.2.1.2	Consultancy Revenue	Amount of revenue generated	2707003	1235435	46	54
3.2	3.2.1.3		Number of consultancy activities undertaken	34	42	124	-24
3.3	3.3.1.1	Higher Education Admission	No. of students admitted to prestigious institutions	123	167	136	-36
3.3	3.3.2.1		Number of MOUs signed	33	25	76	24
3.3	3.3.2.2	Students who enrolled for internships/higher studies	Number of students who enrolled for internships/higher studies	1666	3365	202	-102
3.3	3.3.3.1		Number of beneficiaries	1500	1562	104	-4
3.3	3.3.4.1	GATE Coaching Hours	No. of GATE Coaching Hours conducted	433	420	97	3
3.3	3.3.4.2		Number of students attending GATE Coaching Classes	288	291	101	-1
3.3	3.3.4.3	GATE Qualified Students	No. of GATE qualified students	25	18	72	28
3.3	3.3.4.4	Assessment Tests	No. of assessment tests conducted for competitive exams	75	73	97	3

Major Gaps Identified & Corrective Actions

1. **Interdisciplinary Courses (1.1.2.1)**
   - **Gap**: 21% (Achieved 79% of target)
   - **Corrective Action**: Increase collaboration across departments to introduce more interdisciplinary courses. The course offerings might need to be evaluated based on current industry trends to encourage greater participation.
2. **Placed Students (1.1.2.2)**
   - **Gap**: 22% (Achieved 78% of target)
   - **Corrective Action**: Strengthen placement training, resume building, and interview preparation. Focus on building stronger industry partnerships to improve placement rates.
3. **Adjunct Faculty (1.1.4.4)**
   - **Gap**: 71% (Achieved 29% of target)
   - **Corrective Action**: Increase outreach to experienced professionals or academic experts who can contribute as adjunct faculty. Offer incentives to attract more qualified adjuncts.
4. **Books in Central Library (1.1.5.2)**
   - **Gap**: 277% (Achieved 377% of target)
   - **Corrective Action**: The library appears to have exceeded the target significantly, which is positive. However, the excessive number may suggest overstocking or duplication of resources. A review should be conducted to ensure the collection aligns with academic needs.
5. **Internships for Practice Learning (1.2.1.2)**
   - **Gap**: 64% (Achieved 164% of target)
   - **Corrective Action**: Further efforts can be made to enhance industry partnerships to secure additional internship opportunities. Additionally, ensuring that internships are aligned with student career goals would optimize their effectiveness.
6. **Industry Projects (1.2.1.3)**
   - **Gap**: 64% (Achieved 36% of target)
   - **Corrective Action**: Develop more industry collaboration initiatives, particularly in the form of joint research projects, to enhance engagement with real-world challenges.
7. **Webinars for Quality Enhancement (1.2.3.1)**
   - **Gap**: 36% (Achieved 64% of target)
   - **Corrective Action**: Increase the frequency of webinars on emerging trends in education and research. Ensure that these are marketed effectively to maximize student and faculty participation.
8. **Seed Money for Projects (1.2.4.4)**
   - **Gap**: 100% (Achieved 0% of target)
   - **Corrective Action**: Establish a dedicated fund for student projects and promote seed funding opportunities through grants or institutional support.
9. **Students Exchanged for Research with Universities (1.2.4.5)**
   - **Gap**: 29% (Achieved 71% of target)
   - **Corrective Action**: Increase efforts to partner with international and national universities for research exchange programs. Promote these opportunities more actively within student communities.
10. **Student Research Projects (1.2.4.6)**
    - **Gap**: 23% (Achieved 123% of target)
    - **Corrective Action**: Despite exceeding the target, it's essential to ensure that the quality and impact of these projects are on par with the objectives. A focus on mentorship and quality assurance could enhance outcomes.
11. **Student Grants (1.2.4.8)**
    - **Gap**: 1814% (Achieved 1914% of target)
    - **Corrective Action**: The achievement seems disproportionately high. It would be useful to review the allocation process and ensure the grants are reaching the right students and are being utilized efficiently.

12. **Students Benefitted through e-Learning Platform (1.2.5.1)**
    o **Gap**: 12% (Achieved 112% of target)
    o **Corrective Action**: Focus on increasing engagement with the e-learning platform by integrating more interactive content, regular updates, and targeted campaigns to encourage student participation.
13. **Students with Good CGPA (>8.5) (1.3.2.1)**
    o **Gap**: 49% (Achieved 149% of target)
    o **Corrective Action**: Implement targeted academic interventions for students below the target CGPA. This can include tutoring, peer mentoring, and personalized academic support.
14. **Faculty Rating (1.3.2.2)**
    o **Gap**: 20% (Achieved 80% of target)
    o **Corrective Action**: Address the feedback from students to enhance faculty performance. Regular faculty development programs and feedback mechanisms can help improve ratings.

High Gap Areas (≥ 20%)

Goal Code	Initiative	Gap %	Identified Gaps	Corrective Actions
1.1.2.1	Interdisciplinary Courses	21%	Limited course diversity or cross-department collaboration	- Encourage joint offerings across departments- Incentivize faculty to develop new interdisciplinary electives
1.1.2.2	Placed Students	22%	Placement drive limitations; skill-industry mismatch	- Boost industry tie-ups & training programs- Improve soft skills, mock interviews, resume building
1.1.4.2	% of Faculty with Ph.D	10% (still significant)	Disproportion between total and Ph.D-qualified faculty	- Sponsor faculty for Ph.D programs- Recruit more Ph.D holders
1.1.4.4	Adjunct Faculty	71%	Lack of active industry experts or visiting faculty	- Build partnerships with industry and alumni- Offer flexible engagement terms
1.2.1.3	Industry Projects	64%	Low industry participation or awareness	- Create a dedicated industry liaison cell- Set targets for department-level industry projects
1.2.3.1	Webinars	36%	Less engagement from experts; scheduling issues	- Plan monthly themes & early scheduling- Invite notable alumni and experts
1.2.3.2	Students Benefitted from Webinars	33%	Poor student turnout or awareness	- Integrate webinars into coursework- Provide participation certificates or credits
1.2.4.1	Smart India Hackathon	35%	Low awareness, mentorship, or motivation	- Organize internal hackathons- Provide incentives and team support

1.2.4.3	Mini & Major Projects	24%	Lack of structured guidance or limited scope	- Make projects credit-based- Assign internal/external mentors
1.2.4.4	Seed Money	100%	No seed money disbursed	- Set aside a dedicated innovation fund- Simplify proposal process for students
1.3.2.2	Faculty Rating	20%	Student dissatisfaction; possible pedagogical gaps	- Conduct TTT (Train the Trainer) workshops- Collect detailed qualitative feedback for improvement

Moderate Gap Areas (10–19%)

Goal Code	Initiative	Gap %	Suggestions
1.2.1.1	Lab Courses for Self-learning	7%	Slight increase in lab-centric curriculum may help
1.2.4.5	Students Exchanged for Research	29%	More MoUs with international/domestic institutions needed
1.2.6.1	Intra & Inter Events Participation	6%	Enhance publicity and make participation credit-linked

Overachieved / No Gap Areas

Several metrics such as Ph.D faculty appointed, ICT-enabled classrooms, internships, student grants, MOOCs, and student publications show **excellent performance**. These areas reflect strong execution and institutional strength.