INSTITUTIONAL DEVELOPMENT PROPOSAL

for

TEQIP Phase-III

Submitted to

NATIONAL PROJECT IMPLEMENTATION UNIT (NPIU)

NEW DELHI

Submitted by

REWA ENGINEERING COLLEGE, REWA (MP)

(Declared Autonomous by the Govt. of M.P.)

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1. INSTITUTIONAL BASIC INFORMATION

1.1 Institutional Identity

- Name and address of the Institution : REWA ENGINEERING COLLEGE, REWA (M. P.)
  (Autonomous declared by M. P. GOVT)
  Rewa Engineering College, Rewa (M.P.) 486002

- Year of establishment : 1964

- Is the Institution AICTE approved? : Yes
  Furnish AICTE approval No. : 1-22432791

- Type of Institution : Govt. funded

- Status of Institution : Non-autonomous
  (*Autonomous declared by M. P. GOVT*)

- Name and Designation of Head of the Institution : **Dr. Dinesh Kumar Singh**
  Principal

1.2 Academic Information:

- **Engineering UG and PG programmes offered in Academic year 2016-17:**

S. No	Title of programmes	Level (UG, PG, Ph.D.)	Duration (Years)	Year of starting	AICTE sanctioned annual intake	Total student strength in all years of study
1	B. E. Civil	UG	4	1964	(60+12) =72	288
2	B. E. Mechanical	UG	4	1964	(60+12) =72	288
3	B. E. Electrical	UG	4	1964	(40+08) =48	192
4	B. E. Electronics & Comm.	UG	4	1985	(60+12) =72	288

- **NBA Accreditation Status of UG and PG programmes as on 31st December 2016: Total no of programmes eligible for accreditation (at least one batch pass out): 04**

S. No	Title of programmes	Level (UG, PG, Ph.D.)	Duration (Years)	Year of starting	Eligibility
1	B. E. Civil	UG	4	1964	Yes
2	B. E. Mechanical	UG	4	1964	Yes
3	B. E. Electrical	UG	4	1964	Yes
4	B. E. Electronics & Comm.	UG	4	1985	Yes

No. of programmes accredited: Nil

S. No	Title of programmes	Level (UG, PG, Ph.D.)	Duration (Years)	Year of starting	Accreditation Status
1	B. E. Civil	UG	4	1964	Nil
2	B. E. Mechanical	UG	4	1964	Nil
3	B. E. Electrical	UG	4	1964	Nil
4	B. E. Electronics & Comm.	UG	4	1985	Nil

No. of programmes applied for accreditation: 04

S. No	Title of programmes	Level (UG, PG, Ph.D.)	Duration (Years)	Year of starting	Applied
1	B. E. Civil	UG	4	1964	Yes
2	B. E. Mechanical	UG	4	1964	Yes
3	B. E. Electrical	UG	4	1964	Yes
4	B. E. Electronics & Comm.	UG	4	1985	Yes

- **Status of Faculty Associated with Teaching Engineering Students (Regular & Contract) as on 31st December 2016:**

Posts	No. of Sanctioned Regular Posts	Present Status : Number in Position by Highest Qualification												Total Number of regular faculty in Position	Total Vacancies	Total Number of contract faculty in Position
		Doctoral Degree				Masters Degree				Bachelor Degree						
		Engineering Disciplines		(Physics, Chemistry, Maths and English/ other		Engineer ing Disciplines		(Physics, Chemistry, Maths and English/ other		Engineering Disciplines		(Physics, Chemistry, Maths and English/ other				
		R	C	R	C	R	C	R	C	R	C	R	C			
	1	2	3	4	5	6	7	8	9	10	11	12	13	**14= (2+4+6+8+10+12)**	**15= (1-14)**	**16= (3+5+7+9+11+13)**
Principal	1	1												**1**	**0**	**0**
Professors	12	4		1										**5**	**7**	**0**
Associate Professors	23	4		1		1								**6**	**17**	**0**
Assistant Professors	52			5		17					3			**25**	**27**	**0**

R=Regular, C=Contract

2.1Executive Summary

Rewa Engineering College, Rewa is one of the pioneer institutions of Madhya Pradesh and also a leading Institute of the Vindhya region. The college was established by the Government of Madhya Pradesh in the year 1964 and it was known as Government Engineering College, Rewa.In the year 1998 it was declared autonomous by the Government of M.P. with the Board of Governors to look after its affairs. The minister of the department of Technical Education of M.P. is the Chairman of the B.O.G. The college is approved by the All India Council of Technical Education. The advent of the new education policy came up with the establishments of a large number of private engineering institutions in our country and our state driving the institute to fight the competition of attracting and retaining good faculty and the students.

The college is located on the Sirmour road in a calm and quite location just 3 kilometers from a prime location, Sirmour Chauraha. The college campus occupies a land area of 250 acres consisting of different academic departments, laboratories, central workshop, sports grounds, hostels, staff quarters along with bank, post office, electric maintenance section and college dispensary. The college is having fully developed departments as regards to class room facilities, laboratories, computer facilities and the basic infrastructure necessary for efficient functioning. A handsome revenue is earned by the different departments of the college through testing and consultancy.

Rewa Engineering College is proud of its long list of distinguished alumni with many IES, IFS, IPS and IAS officers, many are in the Corporate or Public Sectors who have attained top positions in their organizations. A feather in the crown is our 1973 Electrical batch alumini Mr. Chandrakant Pithawa who was recently awarded the highly esteemed Padmashri award for the year 2017. Another alumni Mr. Chandraprabha Mahaur of EC branch was in the toppers list of the Indian Civil Services Exam 2017. Mr. Rahul Srivastava of 2003 batch got selected in the Group A post of Indian railways Personal Services Exam. of 2010.

The College celebrated its Golden Jubilee in the year 2014 with the Chief Secretary of Madhya Pradesh Mr. Antony Disa as the Chief Guest. Rewa Engineering College has a very well qualified teaching faculty. Most of the teachers have their masters or PhD degrees from the institutes of National Importance such as IITs or NITs. A good number of publications in National and International journals have also been achieved by many faculty members. Paper presentations, Chairing the sessions in International Conferences abroad, reviewer for reputed SCI journals along with publications in SCI journals and members of international Committees in international conferences, such assignments are also being conducted by the faculty members.

In order to develop a technical education system for producing highly competitive human resource and technological services with highest level of competence and skill, the Institutional plan for the college has been prepared and the following objectives been set,

- Recruit, nurture, motivate and empower employees

- Nurture students to improve their employability
- Improve teaching and learning
- Promote research and consultancy services that address the immediate and long-term needs of the industries and the society
- Create a strong relationship with industry and society to cooperate in the advancement of the country's economy.
- Continue to grow, develop and maintain adequate infrastructure.

Furthermore, enable expansion and modernization of existing infrastructure for UG, removal of obsolescence and modernization of labs and establishment of new labs that will open up new areas for providing consultancy and carrying out industrial testing resulting in further augmentation of Internal Revenue Generation for the college.

The college intends to start new branches of Computer Science and Information Technology.

One PG course in Water management has already been sanctioned and will start from the next academic session.

The college is seeking the Deemed University status and the proposal for the same has been submitted to the Government of Madhya Pradesh and it is in process.

The college had also actively participated in the TEQIP I during 2004-09 and has effectively utilized the funds and the opportunity in developing and modernizing the laboratories, workshop, computer facilities and many more.

The Financial requirement as per the budget summary given in section 2.9 of this IDP is Rs 10.00 Crore.

2.2 Action Plan

(a) Improving the learning outcomes of the students:

1) Faculty Training:

S.No.	Measures	*1-6 months*	*7-12 months*	*13-18 months*	*19-24 months*	*25-30 months*	*31-36 months*
1.	Sponsoring faculty for M.Tech. and PhD under QIP or study leave for Qualification Upgradation						
2.	Sponsoring for Short term and long term courses for appropriate courses for Subject Upgradation& Research Competence						
3.	Sponsoring for short term courses and training programmes and organize such programmes in the institution for Pedagogical Training						
4.	Sponsoring for paper presentations in national and international conferences within and outside the country for Participation in Conference.						
5.	arrange within college and sponsor for attending in reputed institutions for Seminar/Workshop etc.						

2) Staff training:

S. No.	Staff	Measures	1-6 months	7-12 months	13-18 months	19-24 months	25-30 months	31-36 months
1.	Technical Staff	Sponsoring for higher qualification for Qualification Upgradation						
		Sponsoring and organizing within the institution for skill development training programmes for Skill Upgradation						
		Sponsoring and organizing within the institution for Computer knowledge upgradation for Computer Knowledge Upgradation (basics of MS Office, Internet and Email)						
		Organizing communication and language skill upgradation programmes for Communication and Language Skill						
		Organize team spirit training programmes for Team spirit						
		Sponsor for training programmes for MIS Training						
		Sponsor for training programmes for Training for women on self defense						
		Organize training programmes Awareness of tendering, procurement and financial management						
2.	Administrative Staff	Organize training programmes for Computer Knowledge Upgradation						
		Sponsor and organize training programmes for Skill Upgradation						
		Organizing communication and language skill upgradation programmes for Communication and Language Skill						
		Organize team spirit training programmes for Team spirit						
		Sponsor for training programmes for MIS Training						
		Sponsor for training programmes for Training for women on self defense						
		Organize training programmes for Awareness of tendering, procurement and financial management						
		Organize training programmes for Right to information rules and procedures						

3) Increasing capacity of UG, PG and PhD education:

S. No.	Measures	1-6 months	7-12 months	13-18 months	19-24 months	25-30 months	31-36 months
1.	Get the NBA Accreditation for all existing programmes.						
2.	Increase in the intake of UG programmes						
3.	One PG course in water management has been sanctioned and will start from the next session in Civil Branch						
4.	Starting new PG programmes in Mechanical, Electrical and Electronics Engg. Branch.						
5.	Starting new PhD programme						
6.	Seeking deemed university status and the proposal for the same, has been submitted to the Govt. of M.P. and it is in process.						

4) Investing in smart classrooms, campus wifi, e-library:

S. No.	Measures	1-6 months	7-12 months	13-18 months	19-24 months	25-30 months	31-36 months
1.	Improvement in existing smart class rooms and constructing new smart class rooms						
2.	Increasing the capacity of the existing E-library. Subscribing more number of E-journals and E-books. Improving the infrastructure for E-library.						
3.	Set up wifi network and increase its range to hostels and staff colony.						

5) Improving the academic performance of SC/ST/OBC/academically week students:

S. No.	Measures	1-6 months	7-12 months	13-18 months	19-24 months	25-30 months	31-36 months
1.	Special coaching classes are provide to week students for Remedial and skill development classes.						

2.	It is proposed to carry out the activities for soft skill development classes on regular basis for weaker sections and SC/ST and OBC students.						
3.	Form group of bright students to help the weak students in supervision of the teacher for Peer assisted learning						
4.	Arrange motivational programmes to improve interpersonal communication skills of the students Non cognitive skill and pass rate						

6. Instituting academic and non-academic reforms including programme flexibility (Is there any need to revise the curriculum? When it was last revised?)

Since the college is affiliated to Technical University RGPV, the curriculum revision cannot be done at the college level. After attaining the Deemed University status curriculum revision/ upgradation shall be achieved.

For non-academic reforms measures shall be taken to improve the sports facilities. Motivate the students for social welfare activities.

2.2(b) Improving employability of the students

7. Increasing interaction with industry (What are the industries located in the vicinity? What role of industry is perceived for the institute?)

S. No.	Measures	*1-6 months*	*7-12 months*	*13-18 months*	*19-24 months*	*25-30 months*	*31-36 months*
1	Establish industry institute partnership cell						
2	Setting up Intellectual Property Right (IPR) Unit of the College						
3	Establish Innovation Cell						
4	Identifying industries for interaction						
5	Identifying specific problems to be undertaken for consultancy work						
6	Visiting industries to identify projects for UG students and assess their laboratories and testing facilities						
7	Laboratory utilization by industry and vice versa						
8	Conduct of programmes for professionals in the industry						
9	Workshops, conferences and symposia with joint participation of industry						
10	Improve the existing training and Placement Cell						

8. Student career counseling and placement:

S.No.	Measures	*1-6 months*	*7-12 months*	*13-18 months*	*19-24 months*	*25-30 months*	*31-36 months*
1	Start counseling cell						
2	Carry out Counseling activities for the students						
3	Strengthen Language Lab facilities						
4	Conducting Communications and Soft skills development programme						
5	Establish Training & Placement Cell						
6	Conduct training programmes in Training and Placement Cell						
7	Effective Feedback system from all stakeholders						
8	Encouraging industry-institute interaction						
9	Improve rating of the institution through NBA Accreditation						

2.2(c) Increasing faculty productivity and motivation

9. Sponsored research, consultancy and other revenue generating activities:

S.No.	Measures	*1-6 months*	*7-12 months*	*13-18 months*	*19-24 months*	*25-30 months*	*31-36 months*
1.	**Sponsored Research**						
2.	Procurement of new machines, equipments and softwares for augumentation in revenue through testing and consultancy work						
3.	Increase the student's intake in UG programmes and start new PG programmes to enhance student fees and other revenues.						

2.3 Provide an action plan with timelines for

1. Obtaining autonomous institution status from UGC

Presently the institute is affiliated to RGPV Bhopal and the proposal Deemed University status has already been submitted to Government of M.P. Thereafter the process for obtaining Autonomous Institution status from UGC shall be initiated.

2. Improving the NBA accreditation status – Under process

2.4 Describe the following in brief:

1. Is any enhanced assistance / mentoring that the institution is looking forward from its ATU?

Yes, the online programmes of the RGPV for different UG subjects are being accessed by the students.

2. Does your BOG need strengthening, if yes, then how?

No

3. Is there an ERP/MIS system existing, if yes, then any improvement, modification suggested.

Yes, All the financial activities of the institution are being processed through MIS system and the same shall be adopted for the academic activities.

4. Is there any mechanism i.e. special classes being conducted in the institution for improving the GATE score?

Recently 16 young and enthusiastic faculty members have been recruited who possess very high GATE score and shall be very helpful to the students in imparting their competitive skills. The institution is planning to initiate course for improving GATE score.

2.5 Provide a Twinning Plan with a high performing institute with the objective of capacity building knowledge transfer and developing long term strategic partnerships. (Twinning plan will be formalized into Twinning agreement after finalizing the twinning partner).

The institute is planning to initiate the process of Twinning with the MNNIT Allahabad as it is very near (130 km by road) from Rewa.

2.6 Is there any difficulty in Recruitment and selection of high-quality faculty? If yes, what are the reason & action plan to solve the issue?

Regular Faculty recruitment is not done at the college level. It is done at the Government level.

2.7 Give an action plan for ensuring that the project activities would be sustained after the end of the Project.

After attaining the Deemed University status which is under process at the Government level, the institute shall be in sound position to sustain the project activities without any hinderance.

2.8 Describe briefly the participation of departments/faculty/students in the IDP preparation.

Suggestions from the faculty members and the students of all the departments through their HODs were invited and thereafter the IDP was processed by a group of senior faculty members.

2.9 Budget Summary

Head of expenditure: Procurement			
S. No.	Department	Key Activities	Cost (Rs in Crore)
1.	CE	Upgradation of Concrete Lab	0.50
		Upgradation of Geotechnical Lab	0.25
		Upgradation of existing computer center	0.25
2.	ME	Upgradation of Material Testing Lab	0.10
		Upgradation of Production Engineering Lab	0.30
		Upgradation of IC Engine Lab	0.10
		Setting up of Departmental Computer Center	0.30
		Upgradation of Workshop	0.20
3.	EE	Upgradation of Machine Lab	0.35
		Upgradation of PE Lab	0.25
		Upgradation of computer center	0.40
4.	EC	Upgradation of VLSI Lab	0.25
		Upgradation of Signal processing and Systems Lab	0.25
		Upgradation of computer and Networking Lab	0.30
		Upgradation of Digital Lab	0.20
5.	-	Construction of Five Classrooms	1.00
6.	-	Equipment for 14 smart classrooms	1.00
Head of expenditure: Academic			
7.	-	Improve Student Learning	0.50
8.	-	Student employability	0.50
9.	-	Increasing Faculty productivity and motivation (research, conference, workshops, seminars, FDPs)	1.25
10.	-	Establishing twinning system with high performing institutions	0.75
Head of expenditure: IOC			
11		Incremental Operating Cost	1.00
		Grand Total	10.00