TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) PHASE-II

MODIFIED INSTITUTIONAL DEVELOPMENT PROPOSAL
for
Sub-Component 1.1: Strengthening Institutions to improve Learning Outcomes And employability of Graduates
(Submitted after obtaining the clearance for the Eligibility Proposal)

1. INSTITUTIONAL BASIC INFORMATION

(Note: Please insert the name of applicant institution and the Sub-component number in the footer on each page of the proposal.)

1.1   Institutional Identity

- Name of the Institution   :   National Institute of Technology Raipur
  Raipur (C.G)
- Is the institution AICTE approved   :   Yes
- Furnish AICTE approval No   :   Institute is NIT (Institute of National Importance)
- Type of Institution   :   Central Govt. funded
- Status of Institution   :   Autonomous Institute of National Importance
- Name of Head of the Institution   :   Dr. Sudarshan Tiwari
- Name of Head of Institution and Project Nodal Officers:

Head and Nodal Officer	Name	Phone Number	Mobile Number	Fax Number	E-mail Address
Head of the Institution (Full time appointee)	Dr. Sudarshan Tiwari	0771-2254200	-	0771-2254600	director@nitrr.ac.in
TEQIP Coordinator	Dr.S. Sanyal	0771-2253934	9826425326	-	ssanyal.mech@nitrr.ac.in
Project Nodal Officer for:					
Academic Activities	Dr. A.M. Rawani	0771-2253155	9893184701	-	amrawani@rediffmail.com
Civil Works including Environment Management	Dr.G. Ramtekkar	-	9893131246	-	gdramtekkar.ce.@nitrr.ac.in
Procurement	Shri Ajay Sharma	0771-2254105	9425373433	-	dyregistraradmin@nitrr.ac.in
Financial aspects	Shri Mani Shankar Singh	0771-2254103	8435905053	-	asstreg.acc@nitrr.ac.in

1.2   Academic Information:

- **Engineering UG and PG Programmes offered in Academic year 2014-15**

S. No.	Title of Programme	Level (UG, PG, Ph.D)	Duration (Years)	Year of Starting	Sanctioned Annual Intake	Total Student Strength
1	B.Tech	UG	4	1956	893	874 (Including 1dasa & 2 MEA)
2	B. Arch	UG	5	1984	62	60
3	M.C.A.	PG	3	1988	92	86
4	Power System & Control	PG (Electrical)	2	1999	25	22

5	Chemical Process Design	PG (Chemical)	2	1997-98	25	14
6	Water Resource Development & Irrigation Engineering	PG (Civil)	2	1986	17	11
7	Structural Engineering	PG (Civil)	2	2014-15	13	11
8	Thermal Engineering	PG (Mechanical)	2	2010-11	17	12
9	Industrial Engineering. & Management	PG (Mechanical)	2	2014-15	13	12
10	Machine Design	PG (Mechanical)	2	2014-15	13	13
11	Applied Geology	PG (App.Geology)	3	1961	15	14
12	Ph.D. (Full Time)	Doctoral	Max. 4 yrs	2009-10	-	29
13	Ph.D. (Part Time)	Doctoral	Max. 6 yrs	2009-10	-	25

- **Accreditation Status of UG Programmes:**

Title of UG Programmes being offered	Whether eligible for	Whether accredited as On 31st March, 2015	Whether "Applied for" As on 31st March, 2015
Civil, Chemical, Mechanical, Mining, Electrical and Electronics & Telecommunication	Applied for Accreditation		Yes

- **Accreditation Status of PG Programmes:**

Title of PG Programmes being offered	Whether eligible for	Whether accredited as On 31st March, 2015	Whether "Applied for" As on 31st March, 2015
Applied Geology, Chemical Engineering Process, Water resources development and irrigation, Thermal Engineering.	Applied for Accreditation		Yes

1.3   Faculty Status (Regular/On-Contract Faculty as on March 31, 2015

Faculty Rank	No. of Sanctioned Regular Post	Doctoral Degree				Masters Degree				Bachelor Degree				Total No. of Regular faculty in Position	Total No. of Vacancies	Total No. of Contract faculty in Position
		Engg Discip		Other Discip		Engg Discip		Other Discip		Engg Discip		Other Discip				
		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	15=(3+5+ 7+9+11+13)	16 = (2 - 15)	17 = (4+6+8+ 10+12+14)
Professor	**38**	17	0	4	0	0	0	0	0	0	0	0	0	21	17	0
Asso.Prof.	**76**	15	0	0	0	0	0	0	0	0	0	0	0	15	61	0
Asstt.Prof.	**152**	41	19	17	6	21	20	0	0	0	0	0	0	79	73	45
Total-->	**266**	73	19	21	6	21	20	0	0	0	0	0	0	**115**	**151**	**45**

Prof. = Professor, Asso. Prof.= Associate Professor, Assit. Prof.= Assistant Professor, R= Regular, C= Contract

Note: 45 Assistant Professors are working on contract of 5 year in AGP 6000, 7000 and they are recruited as regular faculty. They may be regularized as per the norms of MHRD. Remaining 70 unfilled position are filled with temporary faculty on six month basis recruited regularly.

2. Institutional Development Proposal

2.1 Modified proposal for Institute Development Plan under TEQIP-II

National Institute of Technology Raipur has been selected in TEQIP –II under subcomponent 1.1. Institute received first installment of Rs. 5Cr. in October 2013 to carry out the proposed activities as per the guidelines. Different sub-committees (Procurement, Finance, MIS Team, Departmental Teqip coordinators etc.) are identified under/with Nodal Officers to carry out different activities. Rs. 5 Cr. is allocated to different subheads as per the guidelines. Various activities like procurement, assistantships, FSD activities, industry institute activities, management training, process of accreditation, remedial classes for academically weak students etc. has been started and is continued. Based on achieving various targets till May 2015 a revised institute development plan (IDP) has been prepared based on the present status of deliverables/outcomes. Present status and proposed targets for various deliverables, Table 30, for the remaining project duration (i.e. October 2016) is identified in consultation with different stakeholders. In addition to above activities, the institute is also planning to prepare institute governance guidelines (IGG), key performance indicators for the departments and for the institute, Strategic plan of the institute for the next five years (2015 – 2020). An action plan, Table No.31, is prepared for utilizing the remaining amount against the first installment.

Table-30   Projects Targets for Institutions under Sub-Component 1.1

Sl. No.	Deliverables	Base Line	Present Status (May 2015)	Revised status at the end of project (2016)
1	Number of Student registered for • Master in Engineering programme • Doctoral programme in Engineering	53 32	109 54	185 70
2.	Revenue from externally funded R&D projects and consultancies in total revenue (Rs. In lakh)	92.95	209.53	250.00
3	Number of publications in referred journals • National • International	19 52	26 177	40 (J+C) 130 (J+C)
4	IRG as % of total annual recurring expenditure	45.72%	68.63%	80%
5	Number of Co-authored publication in referred journals • National • International	--- 	10 (J+C) 10 (J+C)	25 (J+C) 25 (J+C)
6	Student Credentials (a) Campus placement rate of • UG Students • PG Students (b) Average salary of placement package for (Rs. In lakh/Anum) • UG Students • PG Studenta	52.01% 1.92% 4.11 3.22	56.60% 9.52% 5.08 3.72	80% 20% 6 5
7	Number of collaborative programme with industry	---	---	4
8	Accreditation sataus (applied for)	---	6UG, 4PG	6UG, 4PG
9	Vacancy position for • Faculty • Staff	 ---- ----	 43.61% 75%	 30% 50%
10	Percentage of regular faculty having a Master Degree or a Doctorate Degree in Engineering disciplines	100%	100%	100%
11	Transit rate from 1st to 2nd year for the following • All student • SC and ST students • OBC students • Women Students	70.53% 47.77, 45.76% 69.23%	78.62% 57.25%, 44.06% 62.81% 83.00%	85 % 70 %, 50 % 70 % 85 %
12	Autonomy status	Yes	Yes	Yes
13	Enrolment of faculty with only Bachelor Degree for qualification up gradation.	Nil	Nil	Nil

Table No: 31 18-month Procurement Plan for Works and Goods* for sub-Component 1.1

Name of the institution with location: NIT Raipur, G.E. Road Raipur (C.G.)

Activities	Sub-Activities	Activity Owner	Quarter I: June-Aug 2015		Quarter II: Sep - Nov 2015		Quarter III: Dec 2015 - Feb 2016		Quarter IV: Mar- May 2016		Quarter V: Jun- Aug 2016		Quarter VI: Sep-Oct 2016		Total	
			Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)
Procurement	ICT enabled learning, related software & hardware.		NA													----
	New laboratory for new PG programs		NA													----
	Expenditure on existing laboratories	Nodal Officer Procurement		30.00		50.00		30.72								110.72
	New laboratory for existing PG programs		NA													
	Library i.e. books-books, journals, e-journals course specific software	Prof I/C Library				12.22										12.22
	Membership of online journals & consortium		NA													-----
	Modernization of class rooms	Nodal Officer Procurement				12.00										12.00
	Digital/Virtual learning															----
	Equipments for Institutional TEQIP unit.	Nodal Officer Procurement		5.00												5.00
	Civil Work	Dean P&D, Nodal Officer Procurement						25.00								25.00
	Others															-----

			1	2	3	4	5	6	7	8	9	10	11	12	13	Total
	Sub-total		0.00	35.00	0.00	72.22	0.00	57.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	164.94
Assistantships	PhD students enrolled with TEQIP research assistantship	Dean S/W	6.00	4.35	6.00	4.35	6.00	4.35	6.00	4.35	6.00	4.35	6.00	2.9	36	24.65
	Masters students enrolled with TEQIP teaching assistantship		2.00	0.75	2.00	0.75	2.00	0.75	2.00	0.75	2.00	0.75	2.00	0.5	12	4.25
	Others													6.1		6.1
	Sub-total		8.00	5.10	8.00	5.10	8.00	5.10	8.00	5.10	8.00	5.10	8.00	9.50	48.00	35.00
R&D	Research projects taken by UG /PG students	Dean R&C						1.23								1.23
	Seed grants for research by faculty															----
	Research publications in engineering in refereed journals															----
	Organizing conferences on R&D topics															---
	Patenting of technologies					1.50										1.50
1.	Others					0.50		0.50		0.50		0.50				2.00
	Sub-total		0.00	0.00	0.00	2.00	0.00	1.73	0.00	0.50	0.00	0.50	0.00	0.00	0.00	4.73
FSD	Enrollment of faculty with B.Tech. for M.Tech. degree	Departmental Teqip coordinator,														

	Enrollment of faculty with MTech for PhD degree	HODs, Registrar		0.15				0.15								0.3
	Faculty training in subject domain							0.93								0.93
	Faculty training in pedagogy							5.75								5.75
	Organizing in-house training workshops in teaching/research subjects			8.31		1.00		1.00								10.31
	Participation of faculty in outstation seminar/ conferences/ workshops etc			2.11		1.90		1.50								5.51
	Training/Development of technical/support staff					1.00										1.00
	Others															
	Sub-total		0.00	10.57	0.00	3.90	0.00	9.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.80
Industry Institute Interactions	Collaborative academic programs: BTech/MTech/PhD with industry	Prof I/C III Cell														
	Short term workshops with industry			3.00												3.00
	Academic networking with industry/research institutions including industry-exposure to teachers and students			1.60		2.30		1.03								4.93
	Campus placements of graduates (UG & PG)															
	Students internship at industry															
	Joint activities with industry															

Category	Activity	Responsibility														Total
	Others			0.10		0.60										0.7
	Sub-total		0.00	4.70	0.00	2.90	0.00	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.63
Capacity development	Exposure/Training of senior teaching/non-teaching members in management capacity development	Teqip coordinator , Director		1.00		1.00		1.00								3.00
	Others															
	Sub-total		0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00
Reforms	Fee for NBA accreditation	Dean Academics, Prof I/C Accreditation														
	Activities / Innovations aiming at improvement in quality of education					1.30										1.30
	Others															
	Sub-total		0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30
Academic support for weak students	Support to academically weak students to enhancement their knowledge and skills	Dean Academics		2.00		2.00		2.00		2.00						8.00
	Others (finishing schools)			1.50		1.50		1.70		2.00						6.7
	Sub-total		0.00	3.50	0.00	3.50	0.00	3.70	0.00	4.00	0.00	0.00	0.00	0.00	0.00	14.70
Incremental operating cost	IOC	Teqip Coordinator		6.00		7.00		6.00		7.00		6.00		6.00			38.00
	Sub-total		0.00	6.00	0.00	7.00	0.00	6.00	0.00	7.00	0.00	6.00	0.00	6.00		38.00
	GRAND TOTAL		**8.00**	**65.87**	**8.00**	**98.92**	**8.00**	**85.61**	**8.00**	**16.60**	**8.00**	**11.60**	**8.00**	**15.50**	**48.00**	**294.10**