

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

Ibrahimbagh, Hyderabad-500 031

1. INSTITUTIONAL BASIC INFORMATION

1.1 Institutional Identity

Name of the Institution : **VASAVI COLLEGE OF ENGINEERING**

Is the Institution AICTE approved? : **YES**

AICTE approval No.

UG			
1	F.NO. 40-27-AICTE/5259	08.09.1993	For Civil, Mech, ECE
2	F. NO. 2-17/BIII/RC(M)/93	08.06.1994	For CSE
3	F. NO. 730-50-230(E)/ET/97	02.07.1999	For EEE
4	F.NO. 730-50-230(E)/ET/97	06.11.2000	For IT
5	F. NO. 730-50-230(E)/ET/97	02.05.2008	For all branches UG & PG
6	SCR/1-4162001/2010/EOA	23.08.2010	For all branches UG & PG
7	F.No.South Central/1-404376511/2011/EOA	01.09.2011	For all branches UG & PG
8	F.No.South Central/1-699741761/2012/EOA	10.05.2012	For all branches UG & PG
9	F.No.South Central/1-1431047842/2013/EOA	19.03.2013	For all branches UG & PG
10	F.No.South Central/1-2019713533/2014/EOA	04.06.2014	For all branches UG & PG
PG			
ME (ECE)	F. NO. PG/AP/ME/ECE/2003/15 F. NO. 730-50-230(E)/ET/97 SCR/1-4162001/2010/EOA F.No.South Central/1-404376511/2011/EOA	07.07.2003 02.05.2008 23.08.2010 01.09.2011	Embedded Systems & VLSI Design
ME (ECE)	F.No.South Central/1-404376511/2011/EOA	01.09.2011	Communication Engineering and Signal Processing
ME (CSE)	F.No.South Central/1-404376511/2011/EOA	01.09.2011	Computer Science and
ME (Mech)	F.NO. PG/AP/ME/MECH/2003/16 F. NO. 730-50-230(E)/ET/97 SCR/1-4162001/2010/EOA F.No.South Central/1-404376511/2011/EOQ	07.07.2003 02.05.2008 23.08.2010 01.09.2011	Advanced Design and Manufacturing
ME (EEE)	F.No.South Central/1-699741761/2012/EOA F.No.South Central/1-1431047842/2013/EOA F.No.South Central/1-	10.05.2012 19.03.2013 04.06.2014	Power Systems and Power Electronics

Type of Institution : **Private Un-aided Self-financing**

Status of Institution : **Affiliated College of Osmania University, Hyderabad**

Name of Head of the 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. G.V Ramana Murty Principal	040-23146002	+91 9985306522	040-23146090	principal@staff.vce.ac.in
TEQIP Coordinator and Equity Assurance Plan Implementation	Dr G Ramadevudu	040-23146092	+91 9247802706	040-23146090	dr.ramdev@gmail.com
Project Nodal Officers for:					
Academic Activities	Prof. T. Adilakshmi	040-23146020	+91 9908911700	040-23146090	hodcse@staff.vce.ac.in
Procurement	Prof.K Jaya Sankar	040-23146040	+91 9440162196	040-23146090	hodece@staff.vce.ac.in
Monitoring	Dr.N. Vasantha	040-23146050	+91 9849590500	040-23146090	hodit@staff.vce.ac.in
Civil Works including Environment Management	Prof. B. Sridhar	040-23146010	+91 9949887009	040-23146090	hodcivil@staff.vce.ac.in
Financial aspects	Sri. A.V.G. Bala Krishnaiah	040-23146004	+91 7093501954	040-23146090	cfo@staff.vce.ac.in

1.2 Academic Information:

Engineering Programmes offered (UG)

Sl. No	Title of Programme	Level (UG, PG, PhD)	Duration (Years)	Year of starting	AICTE Sanctioned Annual intake				Total Student Strength
					2011-12	2012-13	2013-14	2014-15	
UG Programme : (4 years)									
1	Civil Engineering	UG	4	1981	60	60	60	60	240+22*
2	Mechanical	UG	4	1981	120	120	120	120	480+41*
3	Electronics and Communication Engineering	UG	4	1981	120	120	120	120	480+33*
4	Computer Science and Engineering	UG	4	1994	120	120	120	120	480+43*
5	Electrical and Electronics Engineering	UG	4	1999	60	60	60	60	240+21*
6	Information	UG	4	2000	60	60	120	120	240+22*
	TOTAL UG:				540	540	600	600	2160+182*

Engineering Programmes offered (PG)

S. No	Title of Programme	Level (UG, PG, Ph.D)	Duration (Years)	Year of starting	AICTE Sanctioned Annual intake				Total Student Strength
					2011-12	2012-13	2013-14	2014-15	
PG Programme : (2 years)									
7	ME (Embedded Systems & VLSI Design) - ECE	PG	2	2003	-	18	18	18	36
8	ME (Advanced Design & Manufacturing) – Mechanical	PG	2	2003	-	18	18	18	36
9	ME (Communication Engg. & Signal Processing) - ECE	PG	2	2011		18	18	18	36
10	M.Tech. (Computer Science & Engg.) - CSE	PG	2	2011		18	18	18	36
11	ME (Power Systems & Power Electronics) - EEE	PG	2	2012		24	24	24	48
	TOTAL PG:				-	96	96	96	182
* Lateral Entry and re-admissions. Faculty - Student Ratio is calculated based on sanctioned intake.									

Accreditation Status of UG Programmes:

Title of UG Programmes being offered	Whether eligible for accreditation or not	Whether accredited as on 31 st March, 2015	Whether Applied for as on 31 st March, 2010
B.E. (Civil)	Y	Yes	NA
B.E. (Mech)	Y		
B.E. (ECE)	Y		
B.E. (CSE)	Y		
B.E. (EEE)	Y		
B.E. (IT)	Y		

Details of earlier accreditation obtained:

2 UG Programmes namely, B.E. (Civil) and B.E. (Mechanical) were accredited for 3 years (2002-05)
 2 UG Programmes namely, B.E. (ECE) and B.E. (CSE) were accredited for 5 years (2002-07)

Accreditation Status of PG Programmes:

Title of PG Programmes being offered	Whether eligible for accreditation or not	Whether accredited as on 31 st March, 2010	Whether Applied for as on 31 st March, 2015
ME (Embedded Systems & VLSI Design) - ECE	YES	No	Yes
ME (Communication Engg. & Signal Processing) - ECE	NO	NA	--
ME (Advanced Design & Manufacturing) – Mechanical	YES	No	Yes
M.Tech (Computer Science & Engg.) - CSE	NO	NA	--
ME (Power Systems & Power Electronics) - EEE	NO	NA	--

1.3 Faculty Status (Regular/On Contract Faculty as on 30th March 2015)

Designation	Sanctioned		In Position				Vacancies	
	Engg	H&S	Regular		Contract		Engg	H&S
			Engg	H&S	Engg	H&S		
Prof.	18	04	10	01	09	-	-01	03
Asso. Prof.	31	09	23	06	-	-	08	03
Asst. Prof.	83	27	56	15	48	09	-21	03
Lect/Visiting faculty	-	-	-	-	-	-	-	-
Total	132	40	89	22	57	09	No vacancies exists as per number of faculty members is concerned	
	172		111		66			
	177							

* The regular posts are 63% of the sanctioned strength of 176.

1.4 Baseline Data

S. No	Parameters	2010-11	2014-15
1	Total strength of students in all programmes and all years of study in the year	2413	2853
2	Total women students in all programmes and all years of study in the year	857	1123
3	Total SC students in all programmes and all years of study in the year	263	314
4	Total ST students in all programmes and all years of study in the year	112	129
5	Total OBC students in all programmes and all years of study in the year	881	1129
6	Number of fully functional P-IV and above level computers available for students in the year	684	797
7	Total number of text books and reference books available in library for UG and PG students in the year	88553	96143
8	% of UG students placed through campus interviews in the year	75%	76.49% Still in progress
9	% of PG students placed through campus interviews in the year	36%	44% Still in progress
10	% of high quality undergraduates (>75% marks) passed out in the year	45	48.27
11	% of high quality postgraduates (>75% marks) passed out in the year		Result awaited
12	Number of research publications in Indian refereed journals in the year	07	16
13	Number of research publications in International refereed journals in the year	23	14
14	Number of patents obtained in the year	NIL	NIL
15	Number of patents filed in the year	NIL	NIL
16	Number of sponsored research projects completed in the year	01	2
17	The transition rate of students in percentage from 1 st year to 2 nd year (i) all students	70.26	84.08% (2013-14)
	(ii) SC	54.71	69.33
	(iii) ST	52.17	67.56
	(iv) OBC	72.86	82.93
	(v) Women	75.12	86.48
18	IRG from students' fee and other charges in the year (Rs. Lac)	1296.56	2251.09
19	IRG from externally funded R&D projects, consultancies and others in the year (Rs. Lac)	119.83	24.64
20	Total IRG in the year (Rs. Lac)	1436.39	2275.73
21	Total annual recurring expenditure of the applicant entity in the year (Rs. Lac)	1644.21	2439.36

The students have secured 18 ranks declared by the Osmania University in the year 2013-14. The overall pass percentage for the year is 95%. The college is therefore, highly sought after for admissions by the students due to which 100% of the seats are filled.

Given here are the details of placements, university ranks, final year pass percentage, and transition rate from first year to second year, over the past four years.

S No.	Parameter	2010-11	2011-12	2012-13	2013-14	2014-15
1	Placements (UG and PG together)	75%	90%	81%	73%	72% Still in Progress
2	University Ranks	Not Applicable	12	25	18	Result awaited
3	Final year pass percentage	Not Applicable	94.82%	95.09%	94.91%	Result awaited
5	Transition rate (%) from 1 st year to 2 nd year	Not Applicable	79.75	80.50	84.08	Result awaited

The college has good academic culture and ambience in terms of infrastructure, facilities and processes which is a clear testimony of the strength and good reputation of our college.

Innovative approaches and Learning Ambience: The College, in its constant pursuit of offering quality education, has created quality infrastructural facilities and established certain advanced laboratories (CISCO- Networking Lab, VLSI Design Centre, Embedded Systems Lab, DSP Lab, CAD/CAM and GIS) dealing with contemporary technologies.

The college has a unique distinction of adopting innovative approaches to enhance student learning whenever need arose; for example the college was first to start language laboratories (Phonetics and Interactive Communication skills Lab) and make it mandatory for all students much before this activity was considered essential by university/AICTE; realizing the need and unable to influence industry based curricular improvements (being an affiliated college), the college has been offering value addition courses in CISCO Networking, VLSI, CAD/CAM, GIS etc., for number of years to enhance student learning and make its student better employable.

2.11 Institutional project implementation arrangements with participation of faculty and staff.

The institutional management, faculty and staff are highly committed to the IDP and the entire document has been evolved with consensus. The faculty of the institution may be involved in some kind of a hierarchy but the work of any nature is completed in a time-bound manner with a high degree of team spirit. The faculty and staff have developed a strategic plan clearly defining the roadmap, targets to be achieved with key success indicator and time. The management provided non-interfering academic pursuit to the faculty which further boosts up the morale of the faculty.

The belongingness and the sense of ownership of the IDP is very high among the faculty and staff. Though all faculty and staff participated in SWOT analysis, a group of 42 faculty members developed the IDP. The provisions indicated in the IDP were worked upon by these faculty members dedicatedly. The task of obtaining and exercising autonomy as a reform is an accepted challenge by the faculty for which they are capable.

The BOG of the institution has approved formation and functioning of the various committees constituted for implementation of the project. The composition, meetings and functions of these committees are as under:

Implementation and Monitoring Arrangements: Though most the of faculty and staff will be involved in implementation of activities proposed in IDP, for coordination purposes following TEQIP unit has been created.

Institutional Arrangements and Structures under Autonomy

The college is affiliated to Osmania University and conferred autonomy by UGC from the academic year 201-15 onwards for a period of six years. The admission of students is based on merit as per State Policy on common entrance examination, counseling, and reservation. However, while the university will remain degree awarding authority, the college will seek academic autonomy from the

affiliating university/UGC by 2012 with the assistance of the Directorate of Technical Education.

Since college was established in 1981 and has all its structures and processes in place the college is ready to function as an autonomous institution. Further, the brainstorming through SWOT reflected majority of faculty, staff and students feeling the need for autonomy in the light of rapidly changing technology to be able to not only develop need based curricula and initiate flexibility to adapt to change but also to be able to create its own USP.

The institutional structures are also in place to ensure smooth exercising of autonomy. The college has already reconstituted its BOG as per UGC norms. The composition of BOG is as follows:

Composition of BOG

S. No.	Name	Category	Nature
1	Prof Md.Suleman Siddiqi Former Vice-Chancellor Osmania University, Hyderabad	Chairman	Chairman
2	Sri P. Ramamohan Rao President, Vasavi Academy of Education	Members of trust/Management	Member
3	Prof. T.V. Subba Rao Vice-President Vasavi Academy of Education		Member
4	Sri M. Krishnamurthy Secretary, Vasavi Academy of Education		Member
5	Sri P.V. Ratnam, Treasurer, Vasavi Academy of Education		Member
6	Sri P. Balaji Member, Vasavi Academy of Education		Member
7	UGC Nominee	UGC Nominee	Member
8	S.R.O., AICTE, Hyderabad	AICTE nominee	Member
9	Mr. UVSN Murthy Joint Director, O/o. CTE	State Government Nominee	Member
10	Prof. A. Venugopal Reddy Dean, Faculty of Engineering Osmania University, Hyderabad	University nominee	Member
11	Dr. M. R. Madhav Former Professor, IIT, Kanpur	Educationalist	Member
12	Sri Bommidala Srikrishna Murthy	Industrialists	Member
13	Dr. K. Jaya Sankar Head, ECE, VCE	Faculty Members from the institute	Member
14	Dr. N. Vasantha Head, I.T, VCE		Member
15	Dr. G.V Ramana Murty Principal, Vasavi College of Engineering	Principal	Ex-officio

BOG shall perform the functions as mentioned in the Good Governance document.

Academic Council

The academic council was constituted as per the UGC guidelines for Autonomous colleges. The composition is given below.

S. No.	Name	Category	Nature
1	Dr. G.V Ramana Murty Head, Department of Mechanical Engineering	Principal	Chairman
2	Prof. A. Venugopal Reddy Dean, Faculty of Engineering Osmania University, Hyderabad	University nominee	member
3	Prof. V.S.S. Kumar Department of civil Engineering Osmania University, Hyd		
4	Prof. P. Laxminarayana Department of Mechanical Engineering Osmania University, Hyd		
5	Dr. K. S. Ratnakar Director GMRF, Hyderabad	Educationalist (Medicine)	Member
6	Dr. V. Sudhakar Professor and Head Department Of Education, EFLU, Hyderabad	Educationalist (Education)	Member
7	Ramesh Loganathan Vice President , Products & Center Head Progress Software, Hyderabad	Industry	Member
8	Dr. C. N.V. Ramana, General Manager, BHEL, Hyderabad	Industry	Member
9	Prof. B. Sridhar , Head-Civil	Heads of Departments	Member
10	Prof. T. Adilakshmi , Head-CSE		
11	Prof. K. Jaya Sankar , Head-ECE		
12	Prof. K.V. Ramana Murty , Head-EEE		
13	Prof. N. Vasantha , Head-IT		
14	Prof. P. Hemagiri Rao , Head-CA		
15	Prof. A.S. Sai Prasad , Head-Physics		
16	Mr. T. Sudhakar Rao , Head-Mathematics		
17	Mr. Ch. Gouri Shankar , Head-Chemistry		
18	Dr.(Ms) Jacqueline Amare, head -H&SS	Faculty member	Member
19	Dr. K. Kishore , Professor, MED		
20	Dr. E. Sreenivasa Rao , Professor, ECE		
21	Dr. M. Chakravarthy , Professor, EEE		
22.	Dr. K. Rammohan Rao Associate Professor, CSE & Systems 'Manager		
23.	Dr. G. Ramadevudu Assistant Professor, Physics	Principal's nominee	Member secretary

Academic Council shall perform the functions as mentioned in the Good Governance document.

BOARD OF STUDIES

The Board of Studies is the basic constituent of the academic system of the college. Its functions will include framing the syllabi for various courses, reviewing and updating syllabi from time to time, introducing new courses of study, determining details of continuous assessment, recommending panels of examiners under the semester system etc. Board of studies of every department shall be constitute as per the UGC guidelines

S. No.	Category	Status
1	Head of the department concerned	Chairman
2	The entire faculty of each specialisation	Member
3	Two experts in the subject from outside the college to be nominated by the Academic Council.	Member
4	One expert to be nominated by the vice-chancellor from a panel of six recommended by the college principal.	Member
5	One representative from industry/corporate sector/allied area relating to placement	Member
6	One postgraduate meritorious alumnus to be nominated by the principal.	Member
7	The chairman, Board of Studies, may with the approval of the principal of the college, co-opt (a) Experts from outside the college whenever special courses of studies are to be formulated (b) Other members of staff of the same faculty	Member

Board of Studies shall perform the functions as mentioned in the Good Governance document

FINANCE COMMITTEE

The Finance Committee will advise the Board of Governors on financial matters. It shall prepare income and expenditure statements of the college in the prescribed format to submit to AFRC for fixation of tuition and others fees of the college. The Finance Committee will be an advisory body to the Board of Governors.

The following is the composition for the Finance Committee as the guidelines of UGC.

S. No.	Category	Status
1	The principal	Chairman
2	Chief Finance Office of the college	Member
3	Sri. P.V.Ratnam, Treasurer, Vasavi Academy of Education, Hyd	Member
4	Dr. P.Venkateswara Rao, Associate Professor, Department of Physics	Member
5	To be nominated, if required	Member
6	To be nominated, if required	Member

Finance committee shall perform the functions as mentioned in the Good Governance document

Institutional Project Budget

Table-29

S. No.	Activities	Project life allocation	Financial year			
			2012-13	2013-14	2014-15 (April-Feb)	Cumulative Expenditure upto 28.02.2015
1	Infrastructure improvements for teaching training and learning through:	-	-	80.99	21.57	102.56
	(i)Modernization and strengthening of laboratories	-	-	-	-	-
	(ii)Establishment of new laboratories for new PG programmes	160.00	-	-	-	-
	(iii)Updation of Learning Resources	14.00	-	-	-	-
	(iv)Procurement of furniture	12.00	-	-	-	-
	(v)Modernization and strengthening of libraries and Increasing access to knowledge resources	6.00	-	-	-	-
2	Providing Teaching and Research Assistantships to increase enrolment in existing and new PG programmes in Engineering disciplines	48.00	13.68	30.96	16.00	60.64
3	Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organizing/participation of faculty in workshops, seminars and conferences) for improved competence based on TNA	60.00	12.98	28.51	25.15	66.64
4	Enhanced Interaction with Industry	16.00	3.17	11.77	3.73	18.67
5	Institutional management capacity enhancement	12.00	0.00	2.55	0.80	3.35
6	Implementation of institutional reforms	8.00	0.00	0.87	13.29	14.16
7	Academic support for weak students under the aegis of Finishing School	16.00	0.15	8.22	4.16	12.53
8	Technical assistance for procurement and academic activities	8.00	0.00	0.00	0.00	0.00
9	Incremental Operating Cost	40.00	1.75	13.93	12.95	28.63
	Total	400.00	31.73	177.80	97.65	307.18

2.13 Targets against the deliverables

Table-30

S. No.	Deliverables	Baseline	Targets to be achieved		2011-12	2012-13
			At the end of 2 years of joining the Project	By project closing		
1	Number of students registered for	72	180	180	112	161
	(a) Masters in Engineering programme (b) Doctoral programme in	Nil	03	15	NA	NA
2	Revenue from externally funded R&D projects and consultancies in total revenue (Rs. In Lac)	119.83	210.00	350.00	17.18	27.18
3	Number of publications I refereed journals	03	08	15	05	02
	(a) National (b) International	11	20	30	39	58
4	IRG as % of total annual recurring expenditure	7.3	8.0	9.0	0.91	0.82
5	Number of co-authored publications in Referred Journals	04	12	25	47	59
	(a) National (b) International	12	30	50		
6	Student credentials					
	(a) campus placement rate of					
	• UG students	75.00	80.00	90.00		
	• PG students	36.00	50.00	60.00		
(b) average salary of placement package for (Rs. in Lac)						
	• UG students	3.00	4.25	5.00		
• PG students	3.50	4.50	6.00			
7	Number of collaborative programmes with Industry	10	14	20	03	--
8	Accreditation status (obtained and applied for)	Applied for renewal	100% of eligible UG + PG programs	100% of eligible UG+PG programs	06	100% of eligible UG+PG programs
9	Vacancy position for faculty and staff (regular)	21%	Vacancy reduced to 10% or less	Zero		
10	Percentage of regular faculty having					
	a) Masters Degree b) Doctorate Degree in Engineering disciplines	70.00 17.00	72 20	75 22	55% 12%	54% 11%

Procurement carried out up to 2014-15

Approved by NPIU			Initiated / Pipe Line Exp.		Committed Expenditure		Actual Expenditure	
Proc method	No. of Pkgs	Amount	No. of Pkgs	Amount	No. of Pkgs	Amount	No. of Pkgs	Amount
Direct	17	95,42,091	17	95,42,091	17	9117960	17	9117960
Shopping	3	1535930	3	15,35,930	3	11,37,913	3	11,37,913
NCBs	-	-	-	-	-	-	-	-
TOTAL	20	110,78,021	20	110,78,021	20	10255873	20	10255873

As per plan the procurement is done and uploaded into PMSS.

Technical Education Quality Improvement Programme (TEQIP) Phase-II

Action Planning for March 2016 to October 2016

Name of the Institution: Vasavi College of Engineering

Sub-component : 1.1

Financial figures to be furnished in Rs. Lakh

Activities	Sub-Activities	Mar-16		Apr-16		May-16		Jun-16		Jul-16		Aug-16		Sep-16		Oct-16		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)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)	Physical Target (Nos.)	Financial Estimate (Rs. Lakh)		
Procurement	ICT enabled learning, related softwares & hardware.																				
	New laboratory for new PG programs																				
	New laboratory for existing PG programs																				
	Library i.e. books, e-books, journals, e-journals course specific softwares																				
	membership of online journals & consortium	5	12.00																5	12.00	
	Digital/Virtual learning																				
	Equipments for Institutional TEQIP unit.			1	10															1	10.00
	Civil Work																				
	Others (for hiring Services)																				
	Sub-total	5	12.00	1	10.00					0	0.00					0	0.00	6	22.00		

Assistantships	Masters students enrolled with TEQIP teaching assistantship	40	3.20	40	3.20	40	3.20	40	3.20	40	3.20	40	3.20	40	3.20	40	3.20	320	25.60
	PhD students enrolled with TEQIP research assistantship	1.00	0.18	1.00	0.18	1.00	0.18	1.00	0.18	1.00	0.18	1.00	0.18	1.00	0.18	1.00	0.18	8	1.44
	Others																		
	Sub-total	41	3.38	41	3.38					41	3.38					41	3.38	328	27.04
R&D	Research projects taken by UG /PG students	1	3.5							1	2.5							2	6.00
	Seed grants for research by faculty			1	0.5	1	0.5	2	1	1	0.5	1	0.5	1	0.5	1	0.5	8	4.00
	Research publications in engineering in refereed journals																	0	0.00
	Organising conferences on R&D topics																	0	0.00
	Patenting of technologies	1	0.4							2	0.5							3	0.90
	Others (sample characterization)	10	0.25	10	0.25	5	0.13	5	0.13	10	0.25	5	0.13	5	0.13	10	0.25	60	1.50
	Sub-total	12	4.15	11	0.75					14	3.75					11	0.75	73	12.40
FSD	Enrollment of faculty with BTech for MTech degree																	0	0.00
	Enrollment of faculty with MTech for PhD degree									25	4							25	4.00
	Faculty training in subject domain	10	1.5	14	2	15	2	15	2	4	0.5	4	0.5	4	0.5	10	1.5	76	10.50
	Faculty training in pedagogy			12	1.5			12	1.5	10	1.5	11	1.5					45	6.00
	Organising inhouse training workshops in			4	8			2	5	2	5			4	8			12	26.00

	teaching/research subjects																		
	Participation of faculty in outstation seminar/conferences/workshops etc	10	4	6	2	6	2	8	2.5	8	2	6	2	6	2	10	5	60	21.50
	Training/Development of technical/support staff	6	1	5	0.75	5	0.75	5	0.75	7	0.7			5	0.5	5	0.5	38	4.95
	Others																		
	Sub-total	26	6.50	41	14.25					56	13.70					25	7.00	256	72.95
Industry Institute Interactions	Collaborative academic programs: BTech/MTech/PhD with industry			1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	7	1.75
	Short term workshops with industry	8	0.5	5	0.5					5	0.5					4	0.3	22	1.80
	Academic networking with industry/research institutions including industry-exposure to teachers and students	5	1.6	6	1.25	6	1.25	6	1.25	10	2.5	5	1	5	1			43	9.85
	Campus placements of graduates (UG & PG)	20	0.2	20	0.2	20	0.2	20	0.2	450	5	10	0.2					540	6.00
	Students internship at industry			40	1.2					40	1.2							80	2.40
	Joint activities with industry			1	1.5			1	1.5					1	2			3	5.00
	Others																	0	0.00
	Sub-total	33	2.30	73	4.90					506	9.45					5	0.55	695	26.80
Capacity development	Exposure/Training of senior teaching/non-teaching members in management capacity development	1	0.2	1	0.5	1	0.5	1	0.5	2	1	2	1			2	1.5	10	5.20

	Others																		
	Sub-total	1	0.20	1	0.50					2	1.00				2	1.50	10	5.20	
Reforms	Fee for NBA accreditation			2	7												2	7.00	
	Activities / Innovations aiming at improvement in quality of education	3	1.5	3	1.5										6	3	12	6.00	
	Others																		
	Sub-total	3	1.50	5	8.50					0	0.00				6	3.00	14	13.00	
Academic support for weak students	Support to academically weak students to enhance their knowledge and skills			33	1	30	1			353	3			30	1	33	0.5	479	6.50
	Others																		
	Sub-total	0	0.00	33	1.00					353	3.00					33	0.50	479	6.50
Incremental operating cost	IOC	8	2.00	8	1.60	8.00	2.00	8.00	1.60	8	2.00	8.00	1.60	8.00	2.00	8	1.60	64	14.40
	GRAND TOTAL	129	3.21 21.24	214	5.30 38.58					980	3.10 37.38				13 1	2.37 19.05	1925	14.40 200.29	

Requirements for Additional Funds:

For remaining period of TEQIP-II project, the BoG has approved Training Need Analysis (TNA) submitted by various departments and the International Travel Plan.

TRAINING NEED ANALYSIS (TNA)

DEPARTMENT OF CIVIL ENGINEERING

Name of the Department: **CIVIL ENGINEERING: TRAINING NEED ANALYSIS FOR FACULTY MEMBERS**

S. No	Description of TNA	Proposed time frame	Organizing/ institution	Names of faculty proposed to be sent
1	Joint Meeting of some of the TEQIP Centres of Excellence in Maharashtra to work out common endeavours for building up a strong R&D contribution in some thrust areas. This will be organized in partnership with the respective Centres of Excellence.	Two to three day programme, sometime in the period August to October 2015	Indian Institute of Technology, Bombay	Dr. C.Mohanlal, Dr. K.Jayasree
2	Focused workshop on review of research and tutorial papers for reputed Indian national journals like SADHANA	Two to three day programme, sometime in the period September to December 2015	Indian Institute of Technology, Bombay	Sri. M.V.S.S.Sastri
3	Short Course on "Geotechnical Investigations for Structural Engineering"	15-17 October 2015	IIT Gandhinagar	Mrs. Aswari Sultana, Ms. B.Divya Vani
4	Winter School-1	11-24 December 2015	IIT Gandhinagar	Dr. B.Narender
5	Winter School- 2	11-24 December 2015	IIT Gandhinagar	Ms. B.Divya Vani, Ms. P.Ramya Sree
6	Attending International Conference Overseas	May June, 2016	Overseas	Dr. M.V.Rama Rao, Dr. K.Jayasree
7	Summer School- Topic 1	June 2016	IIT Gandhinagar	Sri. Siddharth Banerjee, Sri. B.Hari Kiran
8	Attending National Conference	September, 2015 to January, 2016	India	3
9	Total Station Training	November-December, 2015	Hyderabad	2
10	Pedagogy Training	November-December, 2015	VCE	5
11	Research Methodology	May-June, 2016	BITS-Pilani Hyd	2
12	Advanced Concepts on Software Training	May-June, 2016	Hyderabad	2

Name of the Department: CIVIL ENGINEERING: TRAINING NEED ANALYSIS FOR NON-TEACHING STAFF

S. No	Description of TNA	Proposed time frame	Organizing/ institution	Names of faculty proposed to be sent
1	Total Station Training	November-December, 2015	Hyderabad	Sri. M. Jaganaiah Sri. T. Narender Rao Sri. L. S. Reddy Sri. K. Gopal Sri. K.V. Subba Rao Sri. D.S.V. Ramana
2	English Speaking Training	November-December, 2015	Hyderabad	Mr. K.Ravinder Kumar Mr. D.Satyanarayana

Name of the Department: CIVIL ENGINEERING: TRAINING NEED ANALYSIS ON OBE

S. No	Description of TNA	Proposed time frame	Organizing institution	Names of Staff proposed to be deputed
1	OBE/ Choice Based Accreditation	August-December, 2015	ESCI/ IITs/NITS etc	Dr. M.V.Rama Rao Dr. M.Srinivas Dr. T.Srinivas Dr. C.Mohanlal Sri. M.V.S.S.Sastri

In addition to above identified programs, the staff and faculty will be deputed to the programs conducted by IITs/NITs/ Higher learning institutions on research related topics, pedagogy, and skill development. The staff and faculty will also be nominated to the programs suggested by SPFUTS and NPIU from time to time.

**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING
TRAINING NEED ANALYSIS FOR FACULTY MEMBERS**

S.No	Description of TNA	Proposed time frame	Organizing institution	No of faculty proposed to be sent
1	TEQIP Winter Internship and Visiting Researcher Program (December 2015)	2 weeks	IIT Kanpur	1
2	Initiated 2 student based research projects	1 week	IIT Kanpur	1
3	PSCAD Training	2 days	Nayak Power Systems	1
4	TEQIP Electrical Science Conclave	2 days	IIT Gandhinagar	1
5	Digital Electronics and Logical Design	1 week	NIT - Suratkal	1
6	Power Electronics Hardware Developments	2 weeks	Medha Servo Drives	2
7	Flyash Management for Thermal Power Plants	3 days	IIT Delhi	1
8	Gradient Based Numerical Optimization Algorithms	5 days	IIT Khargpur	1
9	Best practices in O&M and failure analysis of synchronous generators	3 days	ESCI Gachibowli	1
10	Workshop on Research Methodology	1 week	IIT Gandhinagar	5
11	Thermoelectricity: The Art of Waste Heat Recovery	5 days	IIT Kharagpur	2
12	Technologies for Hydrogen: Generation & Conversion to Electrical Energy	2 days	IIT Delhi	2
13	Control Engineering Analysis and Design with MATLAB / Simulink	4 days	IISST - Thiruvanthapuram	2

Name of the Department: Electrical and Electronics Engineering : TRAINING NEED ANALYSIS FOR NON-TEACHING STAFF

S.No	Description of TNA	Proposed time frame	Organizing institution	No of Staff members to be deputed
1	Earthing Practices in Electrical Installations	3 days	ESCI Gachibowli	2
2	Fire Prevention Protection and Safety	3 days	National Power Training Institute	1

Name of the Department: EEE: TRAINING NEED ANALYSIS FOR ADMINISTRATIVE STAFF

S.No	Description of TNA	Proposed time frame	Organizing institution	No of Administrative Staff proposed to send
1	MS-Office	1 week	Microsoft	1

In addition to above identified programs, the staff and faculty will be deputed to the programs conducted by IITs/NITs/ Higher learning institution on research related topics, pedagogy, and skill development. The staff and faculty will also be nominated to the programs suggested by SPFUTS and NPIU from time to time.

**DEPARTMENT OF INFORMATION TECHNOLOGY
TRAINING NEED ANALYSIS FOR FACULTY MEMBERS**

S. No.	Description of TNA	Proposed Time Frame	Organizing Institute	No. of Faculty proposed to be sent
1	Mining Intelligence & Knowledge Expectation	9-11 Dec., 2015	IIT, Hyderabad	5
2	National Seminar on Big Data	11-09.2015	OU, Hyd	7
3	Workshop on Design & Innovation	November, 2015	IIT, Gandhinagar	6
4	Workshop on Research Methodologies	February, 2016	IIT, Gandhinagar	7
5	Computer Networking using Windows Server	23-27 Nov., 2015	NITTTR, Bhopal	1
6	Network Security in Wireless Sensor Networks	November, 2015	IIIT, Allahabad	2
7	Computer Networks & Information Security	15-19 December, 2015	NIT Warangal	3
8	Cloud Computing	September, 2015	BITS, Hyderabad	3
9	Pedagogical workshops on selected subjects in Engg. Curriculum	Nov/Dec.-2015 & Mar/April-2016	IIT, Bombay	2
10	Creativity and Innovation at work	Nov 6-8, 2015	IIT Kharagpur	4
11	Cloud Computing	18-01-2016 to 22.01.2016	NITTTR, Bhopal	1
12	Internet of Things	21-22 Aug, 2015	Vasavi College of Engineering	5
13	Signal Processing	December, 2015 & Nov-2015-Feb-2016	IIIT, Hyd & COE Pune	4
14	Image Processing / Neural Networks	May-June, 2016	Collge of Engineering, University of Pune	3
15	Machine Learning	Oct-2015 - Jan-2016	SGGS Nanded & COE Pune	4
16	Signals & Systems	Aug-Oct., 2015 & July-Dec-2015	IIT, Bombay	4
17	TEQIP School on Controls & Systems	April 2016 - June, 2016	IIT Kanpur	2
18	Selected topics in Signal Processing (Wavelet Based Techniques)	Sept-2015 to Dec-2015	COE Pune, SGGS Nanded	2
19	Focussed R&D Workshop on Biometrics & Security	December, 2015	IIT, Bombay	3
20	Certificate course (Online) on Fundamental database system by NPTEL	June 2015 to September, 2015	IIT, Kanpur	2
21	Video Data Processing Multimedia Communication	Nov-2015 to Feb-2016	COEP, Pune	1
22	Embedded Systems Design	May, 2016	CDAC Hyd	2
23	Long Term engagement of faculty	April 2016 - June, 2016	IIT, Kanpur	3
24	Effective Sepaking & Making Prsentations	8-16 May, 2015	IIT, Kharagpur	1
25	Blended Open Online Course in Signals & Systems	Jan-June, 2016	TOKT Project Led by Prof. D.B. Pathak, Dept. of CSE	1
26	Image Processing	November-December, 2015	Yet to confirm	1
27	Neural Networks	November-December, 2015	Yet to confirm	1
28	VLSI Physical Design	October, 2015	Veda IIT, Hyderabad	1
29	FPGA Based VLSI Design	Feb, 2016	OU, Hyd	1

IT: TRAINING NEED ANALYSIS FOR NON-TEACHING STAFF

S. No.	Description of TNA	Proposed Time Frame	Organizing Institute	No. of Faculty proposed to be sent
1	Cloud Computing	07-11, Sept., 2015	NITTTR, Chandigarh	3
2	Network Security & Firewalls	20 Sept., to 9 Octo. , 2015	Gurunanak Dev Polytechnic, Delhi	3

3	Short Term Course on RMDA	16-30 Sept., 2015	IIT, Kharagpur	3
4	R&D Workshop on Video Data Processing & Multimedia Communication	December, 2015	IIT, Bombay	2
5	XML & Web Services	21-25 March, 2016	NITTTR, Chennai	3
6	Cloud Computing	16-20 Nov., 2015	NITTTR, Chennai	2

IT: TRAINING NEED ANALYSIS FOR ADMINISTRATIVE STAFF

S. No.	Description of TNA	Proposed Time Frame	Organizing Institute	No. of Faculty proposed
1	Advanced MS Excel Program (Online)	October-December, 2015	Manipal Global Education Services Pvt Ltd	1

In addition to above identified programs, the staff and faculty will be deputed to the programs conducted by IITs/NITs/ Higher learning institution on research related topics, pedagogy, and skill development. The staff and faculty will also be nominated to the programs suggested by SPFUTS and NPIU from time to time.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING: TRAINING NEED ANALYSIS (TNA) FOR FACULTY MEMBERS

S.No	Description of TNA	Proposed time frame	Organizing institution	No of faculty proposed to send
1	Qualification Upgradation	1 Yr	JNTU/OU/AU	6
2	Management Capacity Building	March 2016	IIM	2
3	National and Internal Conferences	-	-	6
4	Academic LeaderShip Workshop	October 2015	IIT Gandhinagar	1
5	Joint Meeting of some of the TEQIP Centres of Excellence in Maharashtra to work out common endeavours for building up a strong R&D contribution in some thrust areas. This will be organized in partnership with the respective Centres of Excellence	October 2015	IIT Bombay	2
6	symposium on cloud computing, digital forensics and malware	September 2015	BITS HYDERABAD	2
7	Certificate course on Business Analytics using R	October 2015	IIT Hyderabad	2
8	Management Development Programme on STATISTICAL MODELLING FOR DATA ANALYSIS SMDA 2015	December 2015	IIT karagpur	2
9	Workshop on Design and Innovation	October 2015	IIT Gandhinagar	2
10	Pedagogical Workshops on Selected subjects in engineering curriculum	December 2015	IIT Bombay	2
11	Workshop on Research Methodologies	November 2015	IIT Gandhinagar	2
12	Focused R & D workshop on Video Data Processing and Multimedia Communication	December 2015	IIT Bombay	2
13	Two days hands on workshop on Google Analytics	August 2015	CSI Bombay	2
14	Two Day Workshop on Embedded Programming in Arduino Using LabVIEW	September 2015	VIT Vellore	2
15	Embedded system design using 8051 microcontroller.	September-2015	VIT Vellore	2
16	Workshop on "Data Analytics & Business Intelligence"	September-2015	VIT Vellore	1
17	Tools and Techniques for Information Processing Research	September 2015	NIT Tiruchy	2
18	Data Analytics using Big Data	September 2015	ESCI hyderabad	1

CSE: TRAINING NEED ANALYSIS FOR NON-TEACHING STAFF

S.No	Description of TNA	Proposed time frame	Organizing institution	No of Staff proposed to send
1	Network Administration	September 2015	ESCI hyderabad	1
2	Mobile App Development using Andriod	September & October 2015	ESCI Mumbai	2
3	Oracle 11g & 12c DBA	September 2015	ESCI hyderabad	1

CSE: TRAINING NEED ANALYSIS FOR ADMINISTRATIVE STAFF

S.No	Description of TNA	Proposed time frame	Organizing institution	No of Administrative Staff proposed
1	Communication Skills	Januray, 2016	ESCI, Hyderabad	1

In addition to above identified programs, the staff and faculty will be deputed to the programs conducted by IITs/NITs/ Higher learning institution on research related topics, pedagogy, and skill development. The staff and faculty will also be nominated to the programs suggested by SPFUTS and NPIU from time to time.

**DEPARTMENT OF MECHANICAL ENGINEERING DEPARTMENT
TRAINING NEED ANALYSIS FOR FACULTY MEMBERS**

S.No	Description of TNA	Proposed time frame	Organizing institution	No of faculty proposed
1	Focused workshop on review of research and tutorial papers for reputed Indian national journals like SADHANA.	November – January, 2015.	IIT Bombay	2
2	Student Mentor programme	November – January, 2015.	IIT Bombay	2
3	Pedagogical workshops on selected subjects in engineering curriculum	November/ December, 2015.	IIT Bombay	2
4	Educational technology event series	November/ December, 2015.	IIT Bombay	2
5	17 th ISME Conference on Advance in Mechanical Engineering	3 rd to 4 th October 2015	IIT Delhi	2
6	Technologies for Hydrogen: Generation & Conversion to Electrical Energy	8 th to 9 th October 2015	IIT Delhi	2
7	TEQIP Mechanical Sciences Conclave	March 2016	IIT Gandhinagar	2
8	Workshop on Research and Undergraduate Teaching	November/ December, 2015.	IIT Gandhinagar	2
9	A short term course on Micromanufacturing	November/ December, 2015.	IIT Kanpur	1
10	Initiated 2 student based research projects	November/ December, 2015.	IIT Kanpur	2
11	Materials and Metallurgy Curriculum Discussion Workshop	November/ December, 2015.	NIT, Srinagar	2
12	Thermoelectricity: The Art of Waste Heat Recovery	November 6, 7, 20, 21, 27, 2015	Prof. Pallab Banerji, Material Science Centre, IIT Kharagpur	1
13	Training programs on domain knowledge by institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
14	Training programs on industry-institute interaction	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
15	Training programs research methodology, research projects and other R&D activities	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
16	Training on Pedagogy	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2

17	Attending national/International Conferences, workshops, seminars, symposia	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
18	Training programs on OBE, NBA, and NAAC etc.	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
19	Programs on management capacity building	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
20	Orientation courses	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
21	Refresher course	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	2
22	Quality Initiatives in Technical and Higher Educational Institutions (in Compliance with NBA & NAAC Accreditation)	November/ December, 2015.	ESCI	2
23	Total Quality in Vigilance	November/ December, 2015.	ESCI	2
24	Quality & Reliability Management	November/ December, 2015.	ESCI	2
25	TQM Practices and Tools for Organizational Excellence	November/ December, 2015.	ESCI	2

MECHANICAL: TRAINING NEED ANALYSIS FOR NON-TEACHING STAFF

S.No	Description of TNA	Proposed time frame	Organizing institution	No of Staff proposed
1	Training programs on communication skills, life skills	November/ December, 2015.	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	1
2	Training programs on advanced concepts including new experiments	April / May, 2016	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	1

MECHANICAL: TRAINING NEED ANALYSIS FOR ADMINISTRATIVE STAFF

S.No	Description of TNA	Proposed time frame	Organizing institution	No of Administrative Staff proposed
1	Training programs on communication skills, life skills	April / May, 2016	institutions of excellence (IITs, NITs, IISc, IIITs, Central universities etc.)	1

In addition to above identified programs, the staff and faculty will be deputed to the programs conducted by IITs/NITs/ Higher learning institution on research related topics, pedagogy, and skill development. The staff and faculty will also be nominated to the programs suggested by SPFUTS and NPIU from time to time.

DEPARTMENT OF ECE Training Need Analysis for Faculty Members

S.No.	Description of TNA	Proposed time frame	Organizing institution	Number of faculty proposed
1	Signal Processing Algorithms & Architectures	3 days (Sept to Dec, 2015)	SGGS, Nanded, COEP, Pune, VNIT, Nagpur	04
2	VLSI System Design	2 weeks (Nov / Dec 2015)	C-DAC, Hyderabad	02
3	Bio-Medical Signal, Image & Data Processing	3 days (Sept to Dec, 2015)	SGGS, Nanded, COEP, Pune, VNIT, Nagpur	02
4	Micro Controller Systems Design	2 weeks (Nov / Dec 2015)	C-DAC, Hyderabad	03
5	Signals & Systems	6 Months (Jan to Jun, 2016)	T-Ten KT Project, IIT Mumbai	03
6	Advance Digital Communication	01 week / 2 weeks (Dec, 2015 / Jan, 2016)	IIT, Kharagpur / IIT, Kanpur / IIT, Bhubaneswar	04
7	Focused workshop on research skills up-gradation	3 days (Sep to Dec, 2015)	IIT Mumbai	05

ECE: Training Need Analysis for Non-Teaching Staff

S.No.	Description of TNA	Proposed time frame	Organizing institution	Number of Staff proposed
1	Trouble shooting & Servicing of lab equipment	2 weeks (Nov / Dec 2015)	ATI, Ramanthapur, Hyderabad	10
2	VLSI EDA Tools Training	2 weeks (Nov / Dec 2015)	C-DAC, Hyderabad	02
3	Modeling & Simulation Software	2 weeks (Nov / Dec 2015)	IIT, Hyderabad	02

ECE: Training Need Analysis for Administrative Staff

S.No.	Description of TNA	Proposed time frame	Organizing institution	Number of Administrative proposed
1	Managerial capacity development training	2 weeks (Nov / Dec 2015)	ASCI, Khairatabad	04
2	Secretarial Skills	1 week (Dec 2015)	ESCI, Gachibowli	03

In addition to above identified programs, the staff and faculty will be deputed to the programs conducted by IITs/NITs/ Higher learning institution on research related topics, pedagogy, and skill development. The staff and faculty will also be nominated to the programs suggested by SPFUTS and NPIU from time to time.

In addition to the TNA of engineering Department, Basic Sciences and H&SS departments TNA will also be included.

International Travel Plan of the faculty members for the remaining duration of TEQIP-II project.

The International Travel Plan for the remaining duration of TEQIP-II project (ending in the month of October, 2016) of the faculty members submitted by the Heads of the Departments is given below. The funding to the international travel is subjected to release of additional funds under TEQIP-II

S.No	Department	Proposed conference Schedule
1	Civil	One faculty number is proposed by the department
2	CSE	Dr. T. Adilaxmi, HoD will attend an International Conference in the Month of June 2016
3	ECE	One faculty number is proposed by the department
4	EEE	One faculty number is proposed by the department
5	IT	Prof. N.Vasantha, HoD, will attend an International Conference in the Month of February 2016 to be held at Malaysia
6	Mechanical	One faculty number is proposed by the department
7	H&SS	Dr. Jacqueline Amaral, HoD will attend International Conference on Task-Based Language Teaching in Asia, third biennial conference at Ryukoku University, Kyoto, Japan during 25-26 June, 2016. Mrs.G.Meena, Asst. Prof. (Sr. Scale) will attend IA for IAFOR International Conference on language learning to be held during 27-29 Feb, 2016 at Dubai, UAE. Mrs.K. Jhansi Rani, Asst. Prof. (Sr. Scale) will attend for 14 th International Conference on Humanities & Social Science during 22-23 Feb, 2016 at Dubai, UAE.
8	Physics	Dr. G. Ramadevudu, Assistant Professor, will attend International Conference in the Month of July/August 2016
9	Mathematics	Dr. T. Sudhakar Rao, HOD, will attend International Conference in the Month of June /July 2016

Technical Education Quality Improvement Programme (TEQIP) Phase-II
Action Planning for March 2016 to October 2016 Department wise Breakup

Name of the Institution: Vasavi College of Engineering

Sub-component : 1.1

Financial figures to be furnished in Rs. Lakh

		CIVIL	CSE	ECE	EEE	IT	MECH	MATHS	PHYS	CHEM	H&SS	OTHERS	TOTAL	REMARKS	
Procurement	ICT enabled learning, related softwares & hardware.														
	New laboratory for new PG programs														
	New laboratory for existing PG programs														
	Library i.e. books, e-books, journals, e-journals course specific softwares														
	membership of online journals & consortium											12.00	12		
	Digital/Virtual learning														
	Equipments for Institutional TEQIP unit.												10	10	
	Civil Work														
	Others (for hiring Services)														
Assistantships	Masters and Ph.D students enrolled with TEQIP teaching assistantship	0.00	5.00	6.34	5.00	0.00	5.00	0.00	0.00	0.00	0.00	0	21.34		
R&D	Research projects taken by UG /PG students	0.50	0.50	0.50	0.50	0.50	3.50	0	0	0	0	0	6.00		
	Seed grants for research by faculty	0.50	0.50	1.00	1.00	0.50	1.00	0.25	0.50	0.50	0.25	0	6.00		

	Research publications in engineering in refereed journals													
	Organising conferences on R&D topics													
	Patenting of technologies											1	1.00	
	Others (sample characterization)											1.50	1.50	
FSD	Enrollment of faculty with BTech for MTech degree													
	Enrollment of faculty with MTech for PhD degree											4	4.00	
	Faculty training in subject domain	1.00	1.50	2.00	1.00	1.50	1.50	0.50	0.50	0.50	0.50		10.50	
	Faculty training in pedagogy	0.40	1.20	1.20	0.40	1.20	1.20	0.10	0.10	0.10	0.10		6.00	
	Organising inhouse training workshops in teaching/research subjects	2.00	4.00	4.00	2.00	4.00	4.00	1.00	1.50	1.00	1.50		25.00	
	Participation of faculty in outstation seminar/ conferences/ workshops etc	3.00	5.00	5.00	3.00	2.00	5.00	1.00	2.00	1.00	1.00		28.00	
	Training/Development of technical/support staff	0.70	0.70	0.70	0.70	0.70	0.70	0.20	0.20	0.20	0.20		5.00	
	Others													
Industry Institute Interactions	Collaborative academic programs: BTech/MTech/PhD with industry	0.3	0.3	0.4	0.3	0.3	0.4	0	0	0	0		1.75	
	Short term workshops with industry	0.00	0.50	0.50	0.30	0.00	0.50	0.00	0.00	0.00	0.00		1.80	

	Academic networking with industry/research institutions including industry-exposure to teachers and students	1.50	1.60	1.60	1.60	1.60	1.60	0.00	0.00	0.00	0.00		9.50	
	Campus placements of graduates (UG & PG)											6	0.00	
	Students internship at industry	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.00	0.00	0.00		2.40	
	Joint activities with industry	0.8	1.00	1.00	0.50	0.8	1.00	0	0	0	0	0	5.00	
	Others													
Capacity development	Exposure/Training of senior teaching/non-teaching members in management capacity development	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	
	Others													
Reforms	Fee for NBA accreditation	0.00	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	
	Activities / Innovations aiming at improvement in quality of education	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	6.00	
	Others													
Academic support for weak students	Support to academically weak students to enhance their knowledge and skills	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7		7.00	
	Others													
Incremental generation	IOC												15.00	
GRAND TOTAL													196.79	

