

**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME
OF
GOVERNMENT OF INDIA**

Concise Institutional Project Proposal

**Second Cycle Institutions
(Supplementary Document)**

**FOR
A RECOMMENDED ALLOCATION OF RS.117.20 MILLION**

**Submitted on
December 27, 2004**

**To
NATIONAL PROJECT IMPLEMENTATION UNIT
ED.CIL House, Plot No. 18 A, Sector 16 A,
Gautam Budh Nagar, Noida – 201 301.
Through
SPFU, Government of Andhra Pradesh**



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EXECUTIVE SUMMARY

1. About Sreenidhi:

Sreenidhi Institute of Science & Technology is the first Engineering college out of 200 colleges affiliated to Jawaharlal Nehru Technological University, which was accredited by National Board of Accreditation of AICTE. Motivated management and dedicated faculty have aimed at excellence in every aspect of functioning of the institution right from its inception which has resulted in this unique achievement. It is also very heartening to record that Sreenidhi was given National award for best HRD practices instituted by Indian Society for Training and Development, New Delhi. It has been providing leadership to many engineering colleges in Andhra Pradesh and elsewhere. Our institute established a Technology Development and Test Center which is certified by Government of India for testing of hydraulic valves used in India's vital mining industry. Consultancy projects are also taken up for reputed organizations such as Indian Space Research Organization (ISRO), Singareni Collieries Ltd., Institute of Indian Foundrymen etc. Our students and alumni have been doing exceedingly well. A 3rd year student of our college secured first rank in All India GATE examination in ECE. Many of our graduates are working in reputed industries in India and abroad including Microsoft in Seattle, USA.

2. Need for Assistance in view of goals set:

Post-Graduate courses are started in three branches (EEE, ECE and Mech Engg) from the current academic year and few more are proposed to be started in the near future. A number of our teachers are also working for Ph.D in different areas. Our endeavor is to improve the facilities in the institution qualitatively so that necessary R & D activities will get a boost. Besides this, consolidation of undergraduate programmes is also planned to improve academic performance of students and enhance their employability. Our institute also planned for a digital library and self-learning facilities so that UG & PG students, research scholars and faculty will have access to the frontiers of knowledge. Sreenidhi believes that faculty is the heart of the Institution and has tied up with three lead institutions of our State, so that collaborative research work can be carried out. Finances are requested in this proposal for modernization of existing facilities, establishment of essential new facilities, faculty development, Library and computer facilities, services to society and economy and for tribal development.

3. Priorities and Key activities in brief:

- a). Improving undergraduate teaching / learning process through better curricula, better faculty competence, better delivery, better interaction, exposure to industrial practices and imbibing communication skills to the students. Increasing facilities for UG and PG education, LRs and better internet access, establishing new labs and modernizing existing facilities are focused in the proposal.
- b) To provide E-class room facility for all sections and to provide centralized computer facilities and Digital Library. Improving sponsored Research and Consultancy activities are also aimed at. Industry-Institute-Interaction and Entrepreneurship Development are also given priority.

4. Proposed summary and financial needs.

An amount of 117.2 millions of rupees is proposed under the scheme. An outlay of Rs.11.7 M is proposed for civil works without crossing the limit of 10% of the total outlay of the proposal. Operation and maintenance expenditure is also kept as low as possible as per the guidelines. Balance is proposed to be utilized for the equipment, furniture, books and learning resources, consultancy services, research studies / training, study tours (local / foreign) and for key additional staff. The following table gives the abstract of financial requirements proposed.

Sl. No.	Category of Expenditure	Total project life time allocation (4+5)	Allocation requested for 2004-05
(1)	(2)	(3)	(4)
(A)	INVESTMENT COST		
1.	Civil Works*	11.700	0.000
2.	Equipment	65.648	21.945
3.	Furniture	6.952	0.460
4.	Vehicles	1.000	0
5.	Books and Learning Resources	9.500	2.000
6.	Consultancy Services** & Research Studies	1.000	0.200
7.	Training/Study Tours/Fellowships (Local & Foreign)	14.092	0
Sub Total (A)		109.892	24.605
(B)	INCREMENTAL OPERATING COST ***		
8.	Salaries for Additional Key Faculty and Staff	4.800	0.000
9.	Consumables	1.260	0.000
10.	Operation & Maintenance	1.248	0.000
Sub Total (B)		7.308	0.000
Grand Total (A+B)		117.200	24.605

5. Expected outputs and outcomes:

Sreenidhi endeavors to increase number of high quality graduates in relevant and cutting edge technologies by about 60% during the project life period. The professional outputs are proposed to be increased by about 3 times. R & D and consultancy activities and other outputs by networking are sought to be increased enormously. Revenue generation is also sought to be increased by 30%. Services to community and economy are proposed to be increased to a great extent and the internal strengths of the institution are proposed to be increased manifold for achieving the desired results. The outcome indicators such as improved employment rate and earnings of graduates and post-graduates are proposed to be increased. Improvement in the internal efficiency and services of Sreenidhi to the society around are also planned. Technical education offered by the institute is sought to be made responsive to the skills in demand in the market.

(Dr.P.Narasimha Reddy)

Principal

Note: A copy of extract of the resolution passed at the meeting of governing body of SNIST held on 28th December, 2004, authorizing principal of the college to execute such documents and papers and do such acts and things related to implementation of TEQUIP Scheme of the World Bank in SNIST.

UNIT-1

CURRENT INSTITUTIONAL INFORMATION

1.1 INSTITUTIONAL IDENTITY

1.1.1 Name of the Institution: Sreenidhi Institute of Science and Technology

1.1.2 Names of Head of Institution and Nodal Officers for Academic Activities, Civil Works, Procurement and Financial Aspects

Head & Nodal Officer	Name	Phone Numbers	Mobile Number	Fax Numbers	Email Address
Head of the Institution	Dr.P.Narasimhareddy Principal	08415-223001 / 2 Office	98492 02760	040 – 27640394	nrporeddy@hotmail.com info@snist.com
Nodal Officers (TEQIP) for:					
Academic Activities	Prof. K. Sitaram	04024072250	9849709035	-do-	info@snist.com
Civil Works	Prof. P.G.Sastry	040-27634985	-	-do-	-do-
Procurement	Dr.K.S.R.Siva Sai	040-27113136	98493-86010	-do-	Krovvidi_sai@hotmail.com
Financial Management	Sri Neeraj Mathur	040-55844608	9848044608	-do-	Mathur-Neeraj2001@yahoo.com

1.2 ACADEMIC INFORMATION

1.2.1 Engineering Programs offered in 2003-2004

S. No	Title of Program	Level ¹	Duration ² (Years)	Year of starting	Sanctioned Annual Intake ³	Total Student strength
1	Electronics and Communication Engineering (ECE)	U.G	4 years	1997	90+9*	387
2	Electrical and Electronics Engineering (EEE)	U.G	4 years	1997	60+6*	258
3	Mechanical Engineering (ME)	U.G.	4 years	1997	60+6*	258
4	Computer Science and Engineering (CSE)	U.G	4 years	1997	120+12*	516
5	Information Technology (IT)	U.G.	4 years	1997	120+12*	516
6	Electronics & Computer Engineering (ECM)	U.G.	4 years	1999	40+4*	172
7	Biotechnology (BT)	U.G.	4 years	2002	30+3*	66

*10% of the seats are meant for Diploma holders who are admitted at second year level under lateral entry scheme. These additional seats are allotted based on merit through a common entrance test by the Govt. of A.P.

1.2.2	Total strength of students in all courses and all years of study in 2003-2004	2173
1.2.3	Total women students in all courses and all years of study in 2003-2004	683
1.2.4	Total ST students in all courses and all years of study in 2003	93
1.2.5	Total SC students in all courses and all years of study in 2003	311
1.2.6	Total OBC students in all courses and all years of study in 2003	626

1.2.7 Doctoral Programs

- a) Total number of candidates that obtained PhD: **There is no full time programme from the institution up to 2003-04**
- b) Total number of candidates currently registered: **There are 16 teachers who are working for Ph.D on part-time basis for PhD**

Accreditation Status of Programmes

Level of Programs	Total Number of Programs being offered	Number of Programs Eligible for Accreditation	Total Number of Programs Accredited in		Number of Programs for which Accreditation Applied for
			2001-02	2002-03	
Undergraduate	7	6	-	5	1*
Postgraduate	3	-	-	-	-

* B.Tech course in Electronics and Computer Engineering has become eligible for submitting application for accreditation very recently. Application will be submitted to NBA shortly.

** PG courses are started recently from the academic year 2004-05 and not yet eligible for accreditation.

1.3 TEACHING STAFF STATUS

1.3.1 Regular/On-Contract Teaching Staff (2004-05) as on July 31, 2004

Type of Staff	No. Sanctioned	Status	Number in Position by Highest Qualification						Total Number in Position	Total Vacancies
			PhDs		Post-graduates		Degree Holders			
			Engg	Other	Engg	Other	Engg	Other		
Professors	19	Regular	8	0	5	0	0	0	20	-1
		Contract	5	1	1	0	0	0		
Associate Prof./Reader	40	Regular	0	1	15	2	0	0	22	+18
		Contract	0	0	3	1	0	0		
Assistant Prof./Lecturer	80	Regular	0	4	14	3	27	0	94	-14
		Contract	0	1	3	3	38	1		

1.3.2 Visiting Faculty/Part-time Teaching Staff (2003-04) - NIL

Level for which Engaged	Number by Highest Qualification						Total Hours Taught/Week
	PhDs		PG		Degree Holders		
	Engg.	Other	Engg.	Other	Engg.	Other	
UG Teaching							Four
PG Teaching	1	-	-	-	-	-	

- 1.4 AVERAGE RECURRENT COST PER STUDENT Rs.30,200(Thirty Thousand Two Hundred Rupees only) (0.0302 Millions)
(Average recurrent cost per student =Total recurrent expenditure of the institution divided by the total strength of students in all UG and PG engineering programs in March 2004)

- 1.5 CURRENT TEACHER-STUDENT RATIO: 1:15.33
(This is to be calculated by dividing the total number of regular faculty + full-time contract faculty + regular faculty equivalent of visiting/part-time faculty by the total strength of students in all engineering programs in March 2004)(Number of regular faculty equivalent=total number of hours taught by visiting/part-time faculty divided by 16).

UNIT 2

VISION

2.0 Institutional Vision

- To become an exemplary Engineering Education center supported by R & D with strong interaction and linkage with industry within a span of 6 years.
- To become a deemed university which can respond quickly to the skills in demand in the market for different branches of engineering within a decade.

2.1 Identify the part of the Vision you plan to achieve during the current project-life (i.e. your Pragmatic Future)

- 1) To produce competent engineers having high technical proficiency, professional skills, appreciation of societal responsibilities, development of entrepreneurship, ethics and ability to communicate and continuously upgrade their capabilities in tune with rapidly changing technological scenario and globalization.
- 2) To upgrade the curriculum on a continuous basis to cope with skills in demand in the technological and management sector and also in the light of globalization. Institution also shall implement flexibility in the admission process and academic advancement of students especially those coming from weaker sections.
- 3) To qualitatively improve facilities for instructions in theory and practice with improvement of academic excellence in view. It is proposed to upgrade laboratories, Centralized Media Centres, conference rooms and to provide E-class room facilities.
- 4) To Develop centers of excellence in the following areas:
 - a. Design & analysis center in Mechanical Engineering
 - b. Cryptography and Network security
- 5) To ensure faculty and staff development which will have pronounced influence on teaching learning process.
- 6) To build additional facilities for centralized library and computer centre.
- 7) To have improved facilities for Mini/Major projects & R&D activities.
- 8) To improve the students' performance in examinations.
- 9) To start P.G. Courses in the specializations in demand.
- 10) To forge strong alliances with sister institutions in line with existing arrangement. through formal and non-formal networking.
- 11) To effectively interact with industry and R& D organizations in order to expose, students, staff & faculty to practical aspects of engineering.
- 12) To render purposeful services for tribal students of the college in order to enhance their employability.
- 13) Training programmes for youth in unorganized sector and organized labour force for improving their skills in order to enhance their earning capability.
- 14) To conduct various programmes to upgrade entrepreneurial skills of students.

2.2 Indicate key activities in order of priority to achieve your pragmatic future as stated in item 2.1

- 1) To conduct activity analysis and skills in demand survey for different branches of Engineering which forms basics for curriculum development.
- 2) To upgrade the curriculum to respond to the needs of industry by associating different employers including R&D organizations.
- 3) To modernize the laboratories to suit upgraded curriculum and to provide facilities for mini / major projects for students and R&D for faculty.
- 4) Institute believes in improvement in teaching learning process and personality development through the use of Audio visual aids and seminar presentation. Existing conference halls and class rooms are being qualitatively improved by providing modern projection equipment (LCD Projector) and modern seminar presentation equipment.
- 5) It is proposed to expand the existing central computer facilities and central library facilities. An additional space of 2500 sq. mtrs is proposed which will be taken up in two stages in the first and second years of implementation.
- 6) To engage in R & D and consultancy activities through strategic partnership with industries & Professional organizations in the lines which are already in place.
- 7) Some centres of excellence are proposed to be developed in various departments of the college.
- 8) Required furniture which is absolutely necessary are being provided for various labs and facilities during the project life time..
- 9) To purchase one vehicle which will help in promotion of service to society, economy and to develop excellent liaison for R & D and consultancy activities.
- 10) Digital library facilities and self learning equipment and softwares are also planned to be procured which improves the library facilities both qualitatively and quantitatively.
- 11) To forge strong alliances with academic institutions particularly the networking institutions and also on non-formal basis.
- 12) The institute desires to attract and retain competent faculty by offering accelerated promotion scheme and quality improvement through fellowships for M.Tech and Ph.D study.
- 13) To build institutional management capacity the visits of senior faculty and nodal officers are planned to be organized for effective planning and implementation of quality improvement in all spheres of functioning of institution.
- 14) As part of institutional reforms necessary softwares will be purchased and consultancy services will be availed for institutional management and for tracer studies.
- 15) It is planned to create necessary expertise for effective implementation and monitoring of the project through training and study tours of the projecting monitoring staff.
- 16) It is proposed to invite eminent professors from the networking institutions to offer lectures and training in their respective areas of expertise for the benefit of faculty, staff and students of the institution.
- 17) It is planned to expose the students of institution to industrial environment so that their entrepreneurial skills are developed.
- 18) Incremental operating costs are proposed to the barest minimum for the P.G. Courses being started in the college in the areas of Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering.
- 19) To actively organize tribal development plan to help students of weaker sections for improving their learning capabilities, attitudes, communication skills and personality developments and preparing them for further studies and gainful employment.
- 20) As a part of commitment of institution to render services to the community near by it is planned to organize awareness programmes for hygiene, sanitation, water harvesting and energy conservation etc.Strong emphasis will be laid on development of skills and their upgradation in the unorganized and organized labour force.

UNIT-3
IMPLEMENTATION OF INSTITUTIONAL REFORMS

Please give brief statement about processes and activities that would be undertaken to implement the reforms

Academic Reforms	Activities to be undertaken in brief*	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
1. Flexibility in academic programmes	1) Multilevel entry - To continue to accept the admission to diploma holders in lateral entry scheme into 2 nd Yr. operated by Govt. of A.P.	This system is already existing			
	2) To accept students from other Engg. colleges with credit transfer subject to approval from Govt. of A.P.	←→			
	3) To permit students to go to other colleges with credit transfer subject to approval from Govt. of A.P.	←→			
	4) To provide facility of accumulation of credits and permitting slow learners to complete the course at their own pace.	←→			
	5) To provide wide choice of electives to cover skills in demand in the market in various branches on a continuous basis.	←→	→		
	6) To strengthen industry-institute partnership, Entrepreneurship Development, Training, Placement, Consultancy and Personality Development Activities and integrate these in academic programme.				
2. Introduction of reforms in student performance evaluation	1) Increased weightage for continuous assessment in both theory and practicals 2) Emphasis on mini projects and seminar presentations 3) Assignments involving literature survey on current topics in each branch of Engineering.	←→			
3. Establishment of a system for teacher performance appraisal by students, and teacher counseling	A system of performance appraisal of teaching effectiveness of faculty is already in place. Counselling of poor performers through preliminary feedback after 4 weeks of instruction is practiced. This is helping faculty for making mid-course corrections, wherever necessary. Final feedback at the end of semester is taken. This existing system of appraisal and counseling will be further strengthened.	←→			

4. Providing incentives to faculty for participation in continuing education programmes, consulting services, services to community and industry and for securing sponsored Research & Development Projects.	a) Faculty are deputed to attend continuing education programme conducted elsewhere at college cost. This will be further strengthened. This is a continuous process.	←→			
	b) Sharing of consultancy income between faculty, staff and the college is already in place. This will be improved.	←→			
	c) Faculty is encouraged to identify the services that can be rendered to society and industry around. Suitable weightage will be given in best teacher award scheme.	←→			
	d) Faculty is encouraged to submit R&D projects, relevant to industry to various funding agencies, which will be continued suitable weightage will be given for this work under best teacher awards scheme.	←→			
5. Establishment of a system for recognizing merit and outstanding performance of teachers	A scheme for best teacher award based on Teaching effectiveness, results in the examination, contribution for effective functioning of department and college is in place. Improvements of the system by incorporating the aspects such as R&D, consultancy, paper presentation, organization of national level seminars, professional society and personality development activities of students, preparation of transparency banks and instructional media, service to society and economy etc. will be attempted.	←→			
6. Offering service packages that would attract and retain good quality faculty	Deputation for improvement of qualification in the lines of Q.I.P, accelerated promotion scheme, financial incentive for publications in conferences and in refereed journals, patents and other achievements. Package for attending National and International Seminars	←→			
7. Establishment of a system for maintaining record of graduates and conducting regular tracer studies	College has excellent rapport and information exchange with the alumni. Tracer studies will be conducted on yearly basis and observations will be exposed to current students for motivating and guiding them.	←→			

8.Establishment of a governance system with participation of stakeholders	<p>Existing Board of Governors system called (Management Committee of the college) has representation of the Govt. of A.P., industry, academic organizations, representative of affiliating university and AICTE nominee. Board of Governors will be enlarged with the membership to faculty, an alumnus and a parent.</p> <p>The existing management committee of the college is constituted as per the AICTE guidelines with representatives from industry and academic institutes nominated by AICTE / A.P. State Govt. There are only 5 representatives of Education society out of 11 members now. Four more members are nominated already representing faculty, parents of present students, old students of the college and the topper of the present batch of final year students.</p> <p>They are :</p> <ol style="list-style-type: none"> 1) Prof. S. Uday Kumar, Head, CSE Dept., (Faculty Representative) 2) Dr.Sudheer Naik, Eminent Cardiologist (Parent of the present student) 3) Sri G.C.Varaprasad, Software Engineer, Infosys Technologies Ltd., Hyd. (Representative of Alumni) 4) Mr.Akil Anil Kulkarni, College topper of final year, 	←→			
9.Establishment of a modern management system – delegation of decision making, administrative and financial powers to senior functionaries with accountability	Participation of faculty and staff at all levels of administration of the institution will be strengthened. Principal, HODs, Heads of Sections, Deans and in-charges of various activities are given powers for organization of their activities required for effective functioning for which they are accountable. The management committee has authorized the principal to operate in imprest of Rs.25,000 and the Head of the Departments Rs.5,000/- each.	←→			
10.Modernization of administrative and financial management system to increase staff and student friendliness, increase time efficiency and resource efficiency.	1) Student counseling system is already in place. This will be strengthened further.	←→			
	2) Information system for prompt service to students, faculty, staff and parents. Dead lines will be fixed for completing task by the concerned staff and faculty for any service to be provided.	←→			
	3) Awareness to students, faculty and staff for improvement in time and resource efficiency. Drive for conservation of water, electricity etc, will be continued. Tree plantation will be pursued.	←→			

11.Establishment of a Corpus Fund for development activities, a Staff Development Fund for supporting critical staff development activities, a Depreciation Fund for modernization of teaching and training facilities and Maintenance Fund for upkeep of equipment and physical infrastructure*	i) Corpus Fund	Rs.0.6 M/Year	↔	Sought to be increased from various sources 1. Philanthropists 2. Industries 3. Alumni 4.National Conferences		
	ii) Staff Development Fund	Rs.0.3 M / Year	↔			
	iii) Depreciation Fund	Rs.0.6 M/Year	↔			
	iv) Maintenance Fund	Rs.0.3 M / Year	↔			
12.Instituting measures for increasing recovery of cost of education.	a) Optimization of financial resources across the institute and through association with other institutions by formal and non-formal networking and consultancy activities. b) Part of the cost will be recovered from the measures listed in item No.11 (above). However, cost of education is already being recovered to a great extent as our college is self-financing unaided institute Students pay for their transport and other facilities as well.		↔			
13.Instituting practices for maximizing utilization of resources and reducing wastage	Centralized Library and laboratories of many departments are helping to utilize the resources effectively by using them for different branches, thus avoiding duplication. Building Space and equipment will be utilized to the fullest extent by working with optimum batch size of students.		↔			
14.Establishment of mechanisms for regular quality and efficiency audit of institutional activities including academic processes and administrative procedures.	Internal & external audit mechanism will be put in place for quality and efficiency audit once in six months. Audit reports will be perused and discussed for necessary improvement. There will be monthly meetings in this regard department-wise and once in two months at college level.		↔			

- These funds will be apportioned from normal budget of the college and will not be collected from students.

UNIT-4

ACADEMIC EXCELLENCE

4.1 PRIORITIES

Prioritize your objectives for the Project Period by assigning number 1 to 9 against each item below (1 is highest and 9 lowest)

Sl.No.	Objectives	Priority
1.	Improving undergraduate teaching/learning processes through better curricula, better faculty competence, better delivery, better interaction, development of proper attributes, and exposure to industrial practices.	1
2.	To provide E-class room facility and all sections and to provide centralized facilities for computer and Digital Library.	2
3.	Increasing facilities for undergraduate education, equipment. LRs, internet access, establishing centres of excellence.	1
4.	Personality Development and campus placements	1
5.	Increasing efficiency and effectiveness of the education process through better academic discipline and improved governance	3
6.	Improving post-graduate admission to M.Tech and Research programs through better structuring of offerings and increased facilities	2
7.	Improving sponsored Research and Consultancy activities	2
8.	Industry-institute interaction	3
9.	Entrepreneurship Development	3

4.2 CURRICULUM REVISION

4.2.1 Reorientation/Restructuring/closure of UG/PG Programmes

4.2.2 UG/PG programmes to be restructured –NIL

4.2.3 **UG/PG programmes to be reoriented**

Basis for reorientation of the courses is relevance to industry. The curriculum must be dynamic in nature and must respond to the needs of industry. The extent of division of core courses, Elective and Practicals must suitably fixed. Outsourcing by developed countries is growing in favour of Indian companies. A survey and analysis of skills in demand is regularly carried out in our college. Our curriculum must reflect the rapidly advancing industries.

No.	Name of the Programme	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
UG Programmes					
1	Electronics & Communications Engg.	←→			
2	Electrical & Electronics Engineering	←→			
3	Mechanical Engineering	←→			
4	Computer Science and Engineering	←→			
5	Information Technology	←→			
6	Electronics & Computer Engineering	←→			
7	Bio-Technology	←→			

4.2.4 UG/PG programmes to be closed – NIL

4.2.5 Curriculum Improvement / Upgradation of Curricula

It will be a continuous process during project life period and thereafter

Name of the curricula to be improved	Indicate starting and completion time			
	2004-05	2005-06	2006-07	2007-08
Electronics & Communications Engineering	←→			
Electrical & Electronics Engineering	←→			
Mechanical Engineering	←→			
Computer Science and Engineering	←→			
Information Technology	←→			
Electronics & Computer Engineering	←→			
Biotechnology	←→			

4.3. Existing to be modernized of Laboratories and Workshops including Removal of Obsolescence

Department / Facilities	Name of the Lab / workshop	Purpose/ linkage to existing Programme	Indicate starting and completion time			
			2004-05	2005-06	2006-07	2007-08
ECE	Electronic Devices & Circuits	To meet recently revised curriculum	←→			
	Microprocessors & Micro controllers	“	←→			
	Communications	“	←→			
	IC & PDC	“	←→			
	ECAD Laboratory	“	←→			
EEE	Power electronics lab	“	←→			
	Electro mechanics Lab	“	←→			
	Control Systems	“	←→			
	Electrical measurements Lab	“	←→			
	Electrical Systems Simulation	“	←→			
Mech. Engg	Design and Analysis center to be shaped into a center of excellence	“	←→			
	CAM Lab	“	←→			
	Thermal Engg. Lab	“	←→			
	Instrumentation & Control System lab	“	←→			
	Metallurgy Lab	“	←→			
	Mechanics of Solids Lab	“	←→			
	Workshop	“	←→			

CSE/IT	High speed Computer Networks lab	“	←→		
	Multimedia & Web Design Lab	“	←→		
	DBMS Lab	“			
	OOAD Lab	“	←→		
	Central Computer Centre	“	←→		
Bio-Tech	Immunology lab	“	←→		
	Cell biology & biochemistry Lab		←→		
	Bioorganic chemistry Lab	“	←→		
	Microbiology Lab	“	←→		
	Instrumental methods of analysis	“	←→		
	Molecular biology and genetic Engineering Lab	“	←→		
	Bioprocess Lab	“	←→		

4.4. New Programs Proposed

Name of the Program	Level (UG/PG)	Proposed Annual Intake	Proposed Year of Starting	AICTE Approval	
				Obtained (YES/NO)	Applied for (YES/NO)
ECE-Digital systems & computer electronics	PG	18	2004-05	Yes	
EEE-Electrical Power Engg.	PG	18	2004-05	Yes	
Mechanical – CAD/CAM	PG	18	2004-05	Yes	
Computer Science Engg.	PG	18	2005-06	-	Will be applied shortly
Doctoral Programme					Will be applied shortly

AICTE has approved the PG courses at S.Nos. 1 to 3 based on the need for large requirement of P.G. Degree holders at the national level. They have also taken into consideration inherent strengths of ECE, EEE and Mechanical Departments of the college while sanctioning new PG courses from the academic year 2004-05.

College will submit application for PG course in Computer Science and Engineering for starting the course in the academic year 2005-06. Necessary expertise is available and there is great need for PG degree holders in the present stage of software boom in India and abroad.

Doctoral Programmes will also be commenced in the area of our strengths.

4.5 Areas of Doctoral Programmes

Full time doctoral programmes are not available. However, 15 teachers are pursuing Ph.D on part time basis in the following areas.

S.No.	Name of Teacher	Areas / Topic
1.	Mr.Ch. Shiva Reddy	Mech. - Some flow investigations on low diffusing vane compressor.
2.	Mr.A.Kumara Swamy	Mech. - Deformation behaviour of high performance materials.
3.	Mr.M. Venkata Ramana	Mech. - Charecterisation of reclaimed Carbon dioxide process sand
4.	Mr.J. Babu	Mech. - Superplasticity
5.	Mr.S. Udaykumar	CSE - Computer Networks and security
6.	Mr.D. S.R.Murthy	CSE - Neural Networks
7.	Mr.V.S.K.Reddy	CSE - Image Processing
8.	Mr.S.Nagenderkumar	CSE - Parallel Processing
9.	Mr.S.Venkateswarlu	EEE - Multilevel invertors for custom power quality enhancement
10.	Mr.Dharmasa Pawar	EEE - Distributed Power Systems
11.	Mr.T.Chandrasekhar	EEE - Voltage control of induction generator
12.	Mr.G.Laxminarayana	ECE -Global Position Systems
13.	Mr.P.V.Reddy	Physics – Studies on Properties of Doped Materials
14.	Mr.Subash Reddy	Physics – Studies of Physical Properties of Corrective Tissues in Animals
15.	Mr.C.V. Subba Rao	English – Communication Skills in Engineering students : problems and prospects

4.6. Establishment of New Laboratories and Workshops:

Department / Facilities	Name of the Lab / workshop	Purpose/ linkage to existing Programme	Indicate starting and completion time			
			2004 -05	2005 -06	2006- 07	2007 -08
ECE	Equipping the two existing seminar halls to be shaped into media centers	To conduct seminars and Personality Development activities of the college	←→			
	Digital Signal Processing Lab	To cater to revised syllabus	←→			

4.7 A) Centralized Library:

A building extension for existing library is proposed and also some requirements of computers (40 systems) with high a speed server, external data storage facilities, two scanners, two laser printers and a zerox machine are proposed. The total outlay for civil works is Rs. 70 lakhs and learning resource equipment is Rs. 30 lakhs. Besides these digital library facility with 60 systems, with two high end servers and associated equipments are proposed for digital library. Latest books are also proposed to be added. The total out lay is Rs.95 lakhs.

Sl. No.	Name of the activity	2004-05	2005-06	2006-07	2007-08
1.	Extension of library building		←→		
2.	Learning resources	←→			
3.	Digital library	←→			
4.	Books	←→			

4.7 B) Centralized Computer Center:

A building extension for existing centralised computer center is proposed and also additional computer systems (60 Nos.) with high and servers and software will be procured. The building will be taken up in the years 2005-07 at a cost of Rs.47 lakhs.

Sl. No.	Name of the activity	2004-05	2005-06	2006-07	2007-08
1.	Extension of building for existing Computer Center		←→		
2.	Procurement of Computer Systems with required Hardware and Software	←→			

4.8 Faculty Development (Local & Foreign Fellowship programs)

No.	Area of Training	Training duration			
		Within India		Abroad	
		No. of Persons	Person months	No. of Persons	Person months
1	Upgradation of qualification for Ph.D	5	180	-	-
2	Up-gradation of qualification of faculty who have only B.Tech degree.	20*	240	--	--
3	Training at formal Network and non-formal Network institutions.	108	108	-	-

*Many teachers are already doing M-Tech on part time or Sequential Summer School schemes. All most all existing teachers who have bachelor degree will be getting upgraded in their qualification by the end of program life.

4.9 Staff Development (within India only)

Functional areas in which staff is required to be trained.

No.	Functional areas of training	Training duration	
		No. of Persons	Person months
	Training at Networking institutions and in non-formal networking	45	45
1.	Microwave and Radar – Engineering		
2.	VLSI and embedded systems		
3.	Bioprocess Engineering		
4.	Molecular Drug Design		
5.	Down stream processing		
6.	Computer Aided Manufacture		
7.	Non conventional energy resources		
8.	Robotics		
9.	Electrical Simulation		
10.	UML		

4.10 Implementation of improved curricula

No.	Activity	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
1.	Revision & Development of curricula once in three years at UG / PG levels.	←→			
2.	Assessment of skills in demand in the market on a continuous basis	←→			
3.	Performance Assessment / Feed back and remedial instruction	←→			
4.	Innovations in Teaching Methodology including extensive use of media on a continuous basis.	←→			
5.	Visits to Industry and invited talks from industry, R&D and Academic institutions on a continuous basis.	←→			
6.	Projects / Dissertations catering to needs of industry, R&D organizations and community on continuous basis.	←→			

4.11 Improvement in Student Evaluation

No.	Activity	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
1.	Mechanisms for promoting student centered learning environment on a continuous basis.	←→			
2.	System of giving Assignments for enhancing analytical and problem solving skills in students	←→			
3.	Mechanism for Project based learning through mini / major projects facilitating group activity.	←→			
4.	System for Promotion of written and oral communication skills through seminars etc.	←→			

4.12 Research and Consultancy

No.	Activities to be taken for implementation	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
1.	Establishment of Research Promotion and Coordination Cell	←→			
2.	Establishment of Consultancy Cell	←→			
3.	Establishing state of the art laboratories	←→			
4.	Creating R&D facilities for faculty / students	←→			
5.	Financial incentives scheme to faculty and staff out of savings from consultancy income.	←→			

4.13 Enhanced Interaction with Industry

No.	Activity	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
1.	Strengthening of existing Industry Institution Interaction Cell	←→			
2.	Associating industry for promoting activities of entrepreneurship development cell	←→			
3.	Conduct of Continuing Education Programmes and providing corporate training on continuous basis	←→			
4.	Organizing Industrial training for faculty, staff and students	←→			
5.	Strengthening R&D and Consultancy activities	←→			
6.	Strengthening the existing Technology Development and Test Center and promoting new testing facilities	←→			

4.14 Tribal Development Plan (TDP)

No.	Identified Activities	Indicate starting and completion time			
		2004-05	2005-06	2006-07	2007-08
1	Orientation Programme for incoming students	←→			
2	Guidance, counseling and remedial teaching	←→			
3	Special coaching for GATE / IES / other exams on a continuous basis.	←→			
4	Grievance redressal cell formation.	←→			
5	Strengthening of existing book bank scheme and providing self learning facility.	←→			
6	Establishment of language lab for improving linguistic proficiency	←→			
7	Establishment of a cell for empowerment of SC/ST women students.	←→			

Note: Some activities are proposed to be started and completed in the very first year itself. However, there will be continuous improvement during the subsequent years if felt necessary.

UNIT-7

OVERALL PROGRAMME LIFE TIME FINANCIAL REQUIREMENTS FOR INSTITUTIONAL DEVELOPMENT

Promotion of Academic Excellence (Financial Requirement) – Total of 7.1.1 to 7.1.5 (Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution#	Proposed reappropriation of allocation of col.3 #	Additional funds required to meet priorities#	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Civil Works*				11.700	0.000	10.100	1.600	0.000
2.	Equipment				65.648	21.945	22.935	19.228	1.540
3.	Furniture				6.952	0.460	1.725	2.499	2.268
4.	Vehicles				1.000	0.000	0.500	0.500	0.000
5.	Books and Learning Resources				9.500	2.000	2.250	2.250	3.000
6.	Consultancy Services** & Research Studies				1.000	0.200	0.600	0.200	0.000
7.	Training/Study Tours / Fellowships (Local & Foreign)				7.852	0.000	2.100	2.452	3.300
Sub Total (A)					103.652	24.605	40.21	28.729	10.108
(B)	INCREMENTAL OPERATING COST ***								
8.	Salaries for Additional Key Faculty and Staff				4.800	0.000	1.800	1.800	1.200
9.	Consumables				1.000	0.000	0.270	0.330	0.400
10.	Operation & Maintenance				1.248	0.000	0.300	0.448	0.500
Sub Total (B)					7.048	0.000	2.370	2.578	2.100
Grand Total (A+B)					110.700	24.605	42.58	31.307	12.208

+ Including proactive purchase of Rs. 28 lakhs

*Restricted to 10% of Project - life time allocation

** Consultancy may be given for civil works, procurement of goods, implementation of fellowship programs, educational studies, academic activities and other activities

*** Restricted to 15% of Project life time allocation

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7.1.1 Tribal Development Plan

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Equipment				1.900	0.000	1.900	0.000	0.000
2.	Furniture				0.100	0.100	0.000	0.000	0.000
3.	Books and Learning Resources				3.000	0.500	0.500	0.500	1.500
4.	Training/Workshop including orientation courses for ST students about awareness of Engg. Studies.				0.000	0.000	0.000	0.000	0.000
	Sub Total (A)				5.000	0.600	2.400	0.500	1.500
(B)	INCREMENTAL OPERATING COST								
5.	Salaries for Additional Key Faculty and Staff (only honorarium)				0.000	0.000	0.000	0.000	0.000
6.	Consumables				0.050	0.000	0.020	0.030	0.000
7.	Operation & Maintenance				0.100	0.000	0.040	0.060	0.000
	Sub Total (B)				0.150	0.000	0.060	0.090	0.000
	Grand Total (A+B)				5.150	0.600	2.460	0.590	1.500

- Projected financial requirements (please see **Annexure-IV (c)** of NPIU Format) for first six months of project from **January, 2005 to June 2005** is as follows.
- January, 2005 to March 2005 = 0.6
- April 2005 to June 2005 = 2.15 and total expenditure proposed for six months is Rs.2.75 millions.

7.1.2. Institutional Management Capacity Development

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Training/Study Tours/Fellowships (Local & Foreign)				0.900	0.000	0.300	0.300	0.300
	Total				0.900	0.000	0.300	0.300	0.300

7.1.3. Implementation of Reforms

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Books and Learning Resources				0.500	0.000	0.500	0.000	0.000
2.	Consultancy Services & Research Studies				0.100	0.000	0.100	0.000	0.000
3.	Training/Study Tours/Fellowships (Local & Foreign)				2.600	0.000	0.800	0.800	1.000
	Sub Total of (A)				3.200	0.000	1.400	0.800	1.000
(B)	INCREMENTAL OPERATING COST								
4.	Consumables				0.000	0.000	0.000	0.000	0.000
5.	Operation & Maintenance				0.000	0.000	0.000	0.000	0.000
	Sub Total (B)				0.000	0.000	0.000	0.000	0.000
					3.200	0.000	1.400	0.800	1.000

7.1.4. Project Monitoring and Implementation

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Consultancy Services & Research Studies				0.100	0.000	0.100	0.000	0.000
2.	Training/Study Tours/Fellowships (Local & Foreign)				0.000	0.000	0.000	0.000	0.000
Sub Total (A)					0.100	0.000	0.100	0.000	0.000
(B)	INCREMENTAL OPERATING COST								
3.	Consumables				0.000	0.000	0.000	0.000	0.000
4.	Operation & Maintenance				0.000	0.000	0.000	0.000	0.000
Sub Total (B)					0.000	0.000	0.000	0.000	0.000
Grand Total (A+B)					0.100	0.000	0.100	0.000	0.000

7.1.5. Financial Requirement for Promotion of Academic Excellence other than Tribal Development (7.1.1), Institutional Management Capacity Development (7.1.2), Implementation of Reforms (7.1.3) and Project Monitoring and Implementation (7.1.4).

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Civil Works*				11.700	0.000	10.100	1.600	0.000
2.	Equipment				63.748	21.945	21.035	19.228	1.540
3.	Furniture				6.852	0.360	1.725	2.499	2.268
4.	Vehicles (No1)				1.000	0.000	0.500	0.500	0.000
5.	Books and Learning Resources				6.000	1.500	1.250	1.750	1.500
6.	Consultancy Services** & Research Studies				0.800	0.200	0.400	0.200	0.000
7.	Training/Study Tours/Fellowships (Local & Foreign)				4.352	0.000	1.000	1.352	2.000
Sub Total of (A)					94.452	24.0050	36.01	27.129	7.308
(B)	INCREMENTAL OPERATING COST ***								
8.	Salaries for Additional Key Faculty and Staff				4.800	0.000	1.800	1.800	1.200
9.	Consumables				0.950	0.000	0.250	0.300	0.400
10.	Operation & Maintenance				1.148	0.000	0.260	0.388	0.500
Sub Total of (B)					6.898	0.000	2.310	2.488	2.100
Grand Total (A+B)					101.350	24.005	38.320	29.617	9.408

+ Including proactive purchase of Rs. 28 lakhs.

*Restricted to 10% of Project - life time allocation

** Consultancy may be given for civil works, procurement of goods, implementation of fellowship programs, educational studies, academic activities and other activities

*** Restricted to 15% of Project life time allocation

7.2.(a) Networking for entire project life period (Financial Requirement)

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Equipment				0.000	0.000	0.000	0.000	0.000
2.	Training/Workshop / Initiation to Research				3.400	0.100	1.100	1.100	1.100
Sub Total (A)					3.400	0.100	1.100	1.100	1.100
(B)	INCREMENTAL OPERATING COST								
3.	Consumables				0.000	0.000	0.000	0.000	0.000
4.	Operation & Maintenance				0.000	0.000	0.000	0.000	0.000
Sub Total (B)					0.000	0.000	0.000	0.000	0.000
Grand Total (A+B)					3.400	0.100	1.100	1.100	1.100

- Projected financial requirements (please see **Annexure-IV (a)** of NPIU Format) for first six months of project from **January, 2005 to June 2005** is as follows.
- January, 2005 to March 2005 = 0.1
- April 2005 to June 2005 = 0.32

7.3. Services to Community & Economy (Financial Requirement)

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Training/Workshop				2.840	0.100	0.750	0.990	1.000
	Sub Total (A)				2.840	0.100	0.750	0.990	1.000
(B)	INCREMENTAL OPERATING COST								
2.	Consumables				0.260	0.000	0.080	0.080	0.100
3.	Operation & Maintenance				0.000	0.000	0.000	0.000	0.000
	Sub Total (B)				0.260	0.000	0.080	0.080	0.100
	Grand Total (A+B)				3.100	0.100	0.830	1.070	1.100

- Projected financial requirements (please see **Annexure-IV (c)** of NPIU Format) for first six months of project from **January, 2005 to June 2005** is as follows.
- January, 2005 to March 2005 = 0.1
- April 2005 to June 2005 = 0.6

7.4. Category wise Total Allocation

This Table is total of the figures given in Table 7.1, 7.2 and 7.3. Also provide Project lifetime allocation based on the formula given at the end of this table.

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution#	Proposed reappropriation of allocation of col.3 #	Additional funds required to meet priorities#	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1	Civil Works*				11.700	0.000	10.100	1.600	0.000
2	Equipment				65.648	22.280	22.735	19.093	1.540
3	Furniture				6.952	1.460	1.225	1.999	2.268
4	Vehicles				1.000	1.000	0.000	0.000	0.000
5	Books and Learning Resources				9.500	3.500	1.500	1.500	3.000
6	Consultancy Services** & Research Studies				1.000	0.200	0.600	0.200	0.000
7	Training/Study Tours / Fellowships (Local & Foreign)				14.092	0.200	3.950	4.542	5.400
Sub Total (A)					109.892	28.640	40.110	28.934	12.208
(B)	INCREMENTAL OPERATING COST ***								
1	Salaries for Additional Key Faculty and Staff				4.800	0.000	1.800	1.800	1.200
2	Consumables				1.260	0.000	0.330	0.430	0.500
3	Operation & Maintenance				1.248	0.000	0.300	0.448	0.500
Sub Total (B)					7.308	0.000	2.430	2.678	2.200
Grand Total (A+B)					117.20	28.640	42.540	31.612	14.408

+ Including proactive purchase of Rs. 28 lakhs.

*Restricted to 10% of Project - life time allocation

** Consultancy may be given for civil works, procurement of goods, implementation of fellowship programs, educational studies, academic activities and other activities

*** Restricted to 15% of Project life time allocation

7.5. Component Wise Financial Requirement

(Rs in Million)

S.No.	Category of Expenditure	Allocation indicated to institution	Proposed reappropriation of allocation of col.3	Additional funds required to meet priorities	Total project life time allocation (4+5)	Year-wise fund requirement for the remaining period of Project			
						2004-05	2005-06	2006-07	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A)	INVESTMENT COST								
1.	Promotion of Academic Excellence (Total of 7.1)				110.70	24.605	42.580	31.307	12.208
2.	Networking (Total of 7.2)				3.400	0.100	1.100	1.100	1.100
3.	Services to Community & Economy (Total of 7.3)				3.100	0.100	0.830	1.070	1.100
Total					117.200	24.805	44.510	33.477	14.408

UNIT – 8

IMPLEMENTATION AND MONITORING COMMITTEES

I. Implementation of Academic excellence activity.

a) Curriculum Restructuring & Curriculum Implementation and up gradation of curriculum.

Academic senate

S.No.	Name	Designation	Department	Position
1.	Prof. P. Narasimha Reddy	Principal		Chairman
2.	Prof. P.S.R. Murthy	Head	EEE	Member
3.	Prof.C.V.S.Rao	Dean (Acad)	ECE	Member
4.	Prof. K.S. Verma	Head	ECE	Member
5.	Prof. V. Vasudeva Rao	Head	Mech.	Member
6.	Dr. D. Naga Raja	Head	IT	Member
7.	Prof. S. Uday Kumar	Head	CSE	Member
8.	Prof.K. Sita Ram	Dean (Exam)	Mech.	Member
9.	Prof. G.V.Rao	Prof.	Mech	Member
10.	Prof. D.P.Roy	Prof.	ECE	Member
11.	Prof. G.R.M.Reddy	On lien	ECE	Member
12.	Prof.P.R.Naga Srinivasa	Dean (PDTP)	Mech.	Member
13.	Dr. K.S.R. Siva Sai	Assoc. Prof.	Bio-Tech	Member
14.	Prof. Lajpathrai	Head	Sc. & Hum.	Member
15.	Prof. A. Narsaiah	Head	ECM	Member
16.	Prof.P.G.Sastry	Head & Dean (Academic)	Biotech	Convener
17.	Representatives of Industry, R&D Organizations and Academic Institutions (Two members from each discipline)			

Implementation committees will be programme wise. The constitution of the committee will be as follows

The curriculum restructuring committees will be constituted programme-wise as follows:

Constitution of the each committee:

1. Head of the Department : Chairman
2. All Professors of the Department : Members
3. All Associate Professors of the Department : Members
4. Representatives of Industry, R&D Organizations and Academic Institutions (Four members) : Members
5. Sr. most Professor of the Department : Convener

A separate committee is constituted as follows for Science and Humanities Department

1. Head of the Department : Chairman
2. All Professors of the Department : Members
3. All Associate Professors of the Department : Members
4. Representatives of Industry, R&D Organizations and Academic Institutions (Four members)
5. Sr. most Professor / Assoc. Prof. of the Dept : Convener

It is as stated already that restructuring of each UG programme will be done during the year 2005- 2006. How ever continuous upgradation of electives to be offered will be done by assessing skills in demand in the industry every year.

b) **Faculty & Staff recruitment and development committee.**

1.	Dr.C.V.S.Rao	Dean (Admin)	Chairman.
2.	Heads of the Departments		
	Prof. P.S.R. Murthy	Head, EEE	Member
	Prof. K.S. Verma	Head, ECE	Member
	Prof. V. Vasudeva Rao	Head, Mech.	Member
	Dr. D. Naga Raja	Head, IT	Member
	Prof. S. Uday Kumar	Head, CSE	Member
	Dr. K.S.R. Siva Sai	Head, Bio-Tech	Member
	Prof. Lajpathrai	Head, Sc. & Hum.	Member
	Prof. A. Narsaiah	Head, ECM	Member
3.	One invitee from Industry		Member
4.	One invitee from R & D		Member
5.	One invitee from sister academic institution.		Member
6.	Administrative Officer		Convener

c) **Student evaluation committee**

1.	Dr. P.G. Sastry	Dean (Academics)	Chairman
2.	Prof.S.Bhujangarao	ECE	Member
3.	Mr.S.Venkateswarlu	EEE	Member
4.	Mr.M.Venkata Ramana	Mech	Member
5.	Mr.S.Nagendrakumar	CSE	Member
6.	Dr.B.Sreenivasa	Bio-Tech	Member
7.	One associate / asst. professor from each dept.		Members
8.	A Professor from a sister institution		Member
9.	Dean exams		Convenor

d) **Research and Consultancy promotion and co ordination cell.**

1	Dr.Umakanth Sastry	Dean (R&D)	Chairman
2	A Professor from each dept.		
	Prof. K.S.Verma	ECE, Prof.	Member
	Dr.Sumanth	EEE, Assoc. Prof.	Member
	Mr.M.Venkata Ramana	Mech, Assoc. Prof.	Member
	Mr.S.Nagendrakumar	CSE, Assoc. Prof.	Member
	Dr.B.Sreenivasa	Bio-Tech, Asst. Prof.	Member
3	One Invitee from R&D Organization		Member
4	One invitee from Industry		Member
5	One Invitee from Sister Organization		Member
6	One professor nominated by Principal		Convener

e) **Procurement of Civil works.**

1	Prof. P.G. Sastry	Dean, Academic	Chairman
2	Heads of the Departments		
	Prof. P.S.R. Murthy	Head, EEE	Member
	Prof. K.S. Verma	Head, ECE	Member
	Prof. V. Vasudeva Rao	Head, Mech.	Member
	Dr. D. Naga Raja	Head, IT	Member
	Prof. S. Uday Kumar	Head, CSE	Member
	Dr. K.S.R. Siva Sai	Head, Bio-Tech	Member
	Prof. Lajpathrai	Head, Sc. & Hum.	Member
	Prof. A. Narsaiah	Head, ECM	Member
3		One member from PWD	Member
4	Mr. Murty	Construction Engineer	Member
5	Mr. Arun Alapat	Architect	Member
6	Mr. Radha Krishna	Administrative Officer	Convener

f) Procurement of Goods

1	Prof.P.R.Naga Srinivasa	Prof., Mech Engg.	Chairman
2	Heads of the Departments		
	Prof. P.S.R. Murthy	Head, EEE	Member
	Prof. K.S. Verma	Head, ECE	Member
	Prof. V. Vasudeva Rao	Head, Mech.	Member
	Dr. D. Naga Raja	Head, IT	Member
	Prof. S. Uday Kumar	Head, CSE	Member
	Prof. Lajpathrai	Head, Sc. & Hum.	Member
	Prof. A. Narsaiah	Head, ECM	Member
3	Mr.Nagendra Kumar	Assoc. Prof., CSE	Member
	Mr.D.S.R.Murty	Assoc. Prof., IT,	Member
	Mr.V.S.K.Reddy	Assoc. Prof., ECM	Member
	Mr.A.Kumara Swamy	Assoc. Prof., Mech.	Member
	Dr.B.Sreenivas	Asst. Prof., Biotech	Member
	Mr.N.Sreenivasa Reddy	Assoc. Prof., ECE	Member
	Dr.V.Anuradha	Assoc. Prof., English	Member
4	To be nominated by SPFU / BoM	A chartered Accountant	Member
5		Nominee from out side Organization by SPFU	Member
6	Dr.K.S.R.Siva Sai	I/C of procurement (nominated by the college)	Convener

g) Networking Activities

1	Dr.V.Umakanta Sastry	CSE	Chairman
2	Prof.S.Uday Kumar	CSE	Member
3	Mr.T.C.H.Siva Reddy	Mech	Member
4	Mr.Sumanth	EEE	Member
5	Prof.S. Bhujanga Rao	ECE	Member
6	Dr.B.Sreenivas	Biotech	Member
7	Mr.P.Venkat Reddy	Sc. & Hum.	Member
8	Dr.V.Vasu Deva Rao	Mech	Convener

h) Services to Community and Economy.

1	Mr.P.Venkat Reddy	Sc. & Hum.	Chairman
2	Mr. V. Kumara Swamy	ECE	Member
3	Mr. D. Kondaiah	Mech.	Member
4	Mr. Krishnamurthy	EEE	Member
5	Mr. M. Venkat Rao	CSE	Member
6	Mr.C.H.Gopal Reddy	Sc. & Hum.	Convener

i) Industry Institute Interaction Cell.

1	Prof. A.Narasiah, Dean III,	ECM	Chairman
2	Dr.S. Ramgopal Rao	Biotech	Member
3	Mr. S. Kumar Swamy	ECE	Member
5	Mr. K. Saha Devaiah	CSE	Member
6	Mr. Jagabandhukar	EEE	Member
7.	Prof. P.R.Nagasrinivasa	Mech	Convener

j) Tribal Development Plan.

1	Mr. M. Venkata Ramana	Mech.	Chairman
2	Mr. J.Babu	Mech.	Member
3	Mr. K. Sravan Kumar	CSE	Member
4	Mr. M. Venkata Ramana	CSE	Member
5	Dr. V. Srinivas	Sc. & Hum.	Member
6	Mr. T. Radha Krishna	A.O.	Member
7	Mr. T. Venkat Rao	ECE	Member
8	Dr. Anuradha	Sc. & Hum.	Convener

k) Implementation of Reforms.

1	Prof. S. Uday Kumar	CSE	Chairman
2	Mr. S.Venkateswarlu	EEE	Member
3	Mr.K.S.R.Siva Sai	Biotech	Member
4	Dr. M.N. Raja Shekhar	Sc. & Hum.	Member
5	Ms. S. Devika	ECE	Member
6	Mr. D.Kondaiah	Mech.	Convener

l) Ensuring improvements in Administrative and Financial practice.

1	Prof. C.V.S. Rao	DEAN Administration	Chairman
2	Mr. T. Radha Krishna	Administrative Officer	Member
3	Mr. V. Surya Narayana	A.A.O	Member
4	Mr. P. Raju	Asst. Prof. (Mech)	Member
5	Mr. C.V.Subba Rao	Asst. Prof. English	Member
6	Mr. Neeraj Mathur	Chief Administrative Officer	Convener

m) Ensuring auditing of quality of Education, Training and Services.

1	Prof. D.Naga Raja	IT	Chairman
2	Mr. Sumanth	EEE	Member
3	Prof. S.Uday Kumar	CSE	Member
4	Mr. S. Ramgopal	Bio-Tech	Member
5	Mr. A. Kumara Swamy	Mech	Member
6	Prof. S.Bhujanga Rao	ECE	Convener

n) Monitoring Implementation of programme.

1	Prof. K.S. Varma	ECE	Chairman
2	Prof. K.Sita Ram	Mech	Member
3	Prof. S. Uday Kumar	CSE	Member
4	Dr. K.S.R. Siva Sai	Bio-Tech	Member
5	Mr. M. Venkat Ramana	Mech	Member
6	Prof.Sumanth	EEE	Convener

MONITERING COMMITTEES

To monitor implementation of the above activities, the constitution of the monitoring committee is given hereunder:

a) Conducting auditing quality of Education, Training & Services.

1	Prof. K. Sita Ram	Mech	Chairman
2	Prof. A. Narsaiah	ECM	Member
3	Prof. P.S.Rmurthy	EEE	Member
4	Prof. P.R. Naga Srinivasa	Mech	Member
5	Prof. K.S.Varma	ECE	Member
6	One invitee from Industry (to be nominated)		Member
7	One invitee from R & D (to be nominated)		Member
8	One invitee from sister academic institution (to be nominated)		Member
9	Prof. K.S.R.Siva Sai	Bio-Tech	Convener

b) Conducting Audit of Administrative, managerial and financial practices.

1	Prof. P.S.R. Murthy	EEE	Chairman
2	Prof. K.S.Varma	ECE	Member
3	Prof. S. Uday Kumar	CSE	Member
4	Prof. K. Sita Ram	Mech	Member
5	Prof. Natarajan	IT	Member
6	Dr. Vasu Deva Rao	Mech	Convener

c) Monitoring implementation of reforms.

1	Prof. C.V.S.Rao	DEAN, Administration	Chairman
2	Prof. S. Bhujanga Rao	ECE	Member
3	Prof. P.R.Naga Srinivasa	Mech	Member
4	Prof. Lajpath Rai	Science & Humanities	Member
5	Dr. V. Vasu Deva Rao	Mech	Member
6	Prof. D. Naga Raja	IT	Convener

d) Monitoring compliance with MOU.

1	Prof. P.R. Naga Srinivasa	Mech	Chairman
2	Prof. K.S. Varma	ECE	Member
3	Prof. K.Sita Ram	Mech	Member
4	Prof. Umakanth Shastri	CSE	Member
5	Prof. K.S.R. Siva Sai	Bio-Tech	Member
6	One invitee from R & D (to be nominated)		
6	Mr. D.S.R. Murthy	CSE	Convener

e) Monitoring implementation of Tribal development activities.

1	Prof. Lajpath Rai	Science & Humanities	Chairman
2	Mr. Sumanth	EEE	Member
3	Mr. T.Ch. Siva Reddy	Mech	Member
4	Mr. V.S.K. Reddy	ECE	Member
5	Dr. R.P. Rukmini Devi	Bio-Tech	Member
6	Prof. S. Bhujanga Rao	ECE	Convener

f) Preparing quarterly reports on progress in project and reforms implementation, internal audits and compliance with conditions of MOU.

1	Prof. K. Sita Ram	Mech	Chairman
2	Mr. M. Venkat Ramana	Mech	Member
3	Mr. S. Venkateswarlu	EEE	Member
4	Dr. B.Srinivas	Bio-Tech	Member
5	Mr. S. Nagendar Kumar	CSE	Member
6	Mr. G. Laxmi Narayana	ECE	Convener

g) Submitting quarterly reports to their respective BOG and SPFU.

1	Prof. K. Sitaram	Mech	Chairman
2	Prof. K.S. Varma	ECE	Member
3	Prof. K.S.R. Siva Sai	Bio-Tech	Member
4	Prof. S. Natarajan	IT	Member
5	Prof. S. Uday Kumar	CSE	Member
6	Prof. A. Narsaiah	ECM	Convener

h) Ensuring achievement of targets set for Output indicators.

1	Prof. C.V.S. Rao	ECE	Chairman
2	Prof. V.Umakantha Sastry	CSE	Member
3	Dr. V. Vasudeva Rao	Mech	Member
4	Prof. K.Sita Ram	Mech	Member
5	Mr.Sumanth	EEE	Member
6	Prof. S. Uday Kumar	CSE	Convener

UNIT - 9

KEY PERFORMANCE INDICES (OUTPUT INDICATORS AND OUTCOME INDICATORS)

9.1 Output Indicators

Sl. No.	Indicator		Baseline Date (June 2003)		June 2005	June 2006	June 2007	June 2008
	Academic Excellence							
1.	Increased number of high quality graduates in relevant and cutting edge technologies	All Engineering Disciplines	428	34	41	45	50	55
		Cutting Edge Technology Disciplines	290	23	28	31	34	37

Sl. No.	Indicator		Baseline Date (June 2003)		June 2005	June 2006	June 2007	June 2008
2.	Increased number of students completing in engineering disciplines	Master's Degree	-	-	-	-	54	75
		Doctoral Degree	-	-	-	-	-	1

- First Batch of students are admitted into M.Tech programmes in the year 2004-05. The first batch will graduate in August / September, 2006. Increase in intake into M.Tech courses from present 18 per course to 25 is likely to take place from the academic year 2005-06. One Research Associate is appointed in December, 2004. There are 15 teachers working for Ph.D on part time basis. A no. of them are likely to be awarded Ph.D from 2006 on wards.

8			Base Line Date (June 2003)	June 2005	June 2006	June 2007	June 2008
3.	Increased Professional Outputs	Publications (number)	3	6	8	10	12
		Academic Products (number)	6	7	8	9	10
		R & D Products Of Commercial Use - cumulative (number)	-	1	2	3	4
		Patents - cumulative (number) (obtained / applied for) *will be applied	-	-	1*	2*	3*

4.	Networking		Baseline Date (June 2003)		June 2005		June 2006		June 2007		June 2008		
			Nos.	Value	Nos.	Value	Nos.	Value	Nos.	Value	Nos.	Value	
	Number of joint programs/activities	Externally funded research, design and development projects (both ongoing and completed)		-	-	1		2		3		4	
			<i>Consultancy assignments (both ongoing, and completed)</i>	-	-	-	-	1	Rs.5 lacs	2	Rs.10 lacs	3	Rs.15 lacs
			Publications	-	-	2		3		4		5	
			Training programs conducted	-	-	2		3		3		3	

5.	Increased revenue generation (RS. IN LAKHS).	Baseline FY 2003-04		2004-05	2005-06	2006-07	2007-08
		RC	IRG	IRG	IRG	IRG	IRG
	* This depends on tuition fee as fixed by govt. of A.P. from time to time and intake as permitted by AICTE. IRG is expected to increase due to more sponsored projects and consultancy income from 2006 onwards.	584	567	641	691	720	750

6.	Services to Community & Economy		Base Line Date (June 2003)	June 2005	June 2006	June 2007	June 2008
	a) Total No. of Programms		2	2	3	4	5
	b) Total No. of Participants of all types		31	39	60	80	100
	Increased access to technical training for socially disadvantaged groups and unemployed youth	a) Total No. of Participants from socially disadvantaged groups benefited / to be benefited	12	15	20	25	30
		b) Total No. of participants from unemployed youth benefited / to be benefited	9	12	15	20	25
		c) Total No. of Programms offered / to be offered	1	1	1	2	2
	Increased assistance to unorganized sector	a) Total No. of Training programmes offered / to be offered	-	-	1	1	1
		b) Total No. of participants benefited / to be benefited	-	-	12	15	15
	Increased services to industry	a) Total no. of training programmes offered / to be offered	1	1	1	1	2
		b) Total no. of industry personal benefited / to be benefited	10	12	13	20	30
	System Management Capacity Improvement		Baseline Data (june 2003)	June 05	June 06	June 07	June 08
7.	Increased availability of well-trained institution managers		5	15	18	20	22

9.2 Outcome Indicators

OUTCOME INDICATORS

S. No.	Indicators		Baseline Data (June 2003)		June 05		June 06		June 07		June 08	
			A	B	A5	B5	A6	B6	A7	B7	A8	B8
1.	Improved employment rate and earnings of graduates from participating institutions	U.G students Employed through campus interviews	A 16	B 9000	A5 18	B5 10000	A6 20	B6 11000	A7 22	B7 12000	A8 24	B8 13000
		U.G. students Employed through other means	C 10	D 7500	C5 14	D5 8500	C6 16	D6 9000	C7 18	D7 10000	C8 20	D8 11000
		U.G. students who got selected in P.G. program through competitive exams (GATE etc.)	A 18	N.A.	A5 20	N.A.	A6 22	N.A.	A7 24	N.A.	A8 26	N.A.
		P.G. students Employed through campus interviews	A -	B -	A5 -	B5 -	A6 -	B6 -	A7 50	B7 13000	A8 55	B8 14000
		P.G. students Employed through other means	C -	D -	C5 -	D5 -	C6 -	D6 -	C7 40	D7 12000	C8 45	D8 13000

***P.G.courses are started in 2004-05. First batch comes out in 2006-07.**

- This data is to be given for each network. Lead institutions should collect information from their partner institutions and aggregate/average the values as the case may be.
- Against **A**, give % of students graduating in 2002 who got employment through campus interviews. Against **B**, give the mean annual emoluments of this group of students.
- Give the expected changed values for the subsequent years against **A5** to **A8** and **B5** to **B8** for those expected to be employed through campus interviews.
- Against **C**, give % of students who got employment through means other than campus interview within one year of graduation. Against **D**, give the mean annual emoluments of this group.
- Give the expected changed values for the subsequent years against **C5** to **C8** and **D5** to **D8** for those expected to be employed through means other than campus interviews.

2.	Name of Networking Partner 1 NIT, Warangal		Baseline Data (June 2003)	June 05	June 06	June 07	June 08
	Increased cooperation and resource sharing between institutions	Number of faculty-days loaned for academic activities	3	5	7	9	11
		Number of student-days for which students sent to other institutions for curricular and extra-curricular activities	-	50	60	70	80
		Joint projects, consultancies, training programs, publications, seminars, workshops etc.	1	2	2	3	3
		Joint M. Tech. and Ph D programs	-	2	2	3	3
		Number of person-days for which labs, workshops and libraries utilized by faculty and students from other institutions within the same network	-	50	60	70	80
<ul style="list-style-type: none"> ▪ <i>This data is to be given for each network for 2002-2003.</i> ▪ <i>Give the expected increased values for the subsequent years.</i> 							

	Name of Networking Partner 2 JNTU College of Engineering, Hyderabad		Baseline Data (June 2003)	June 05	June 06	June 07	June 08
	Increased cooperation and resource sharing between institutions	Number of faculty-days loaned for academic activities	-	2	3	4	5
		Number of student-days for which students sent to other institutions for curricular and extra-curricular activities	-	20	25	30	35
		Joint projects, consultancies, training programs, publications, seminars, workshops etc.	-	1	2	2	2
		Joint M. Tech. and Ph D programs	-	1	1	2	2
		Number of person-days for which labs, workshops and libraries utilized by faculty and students from other institutions within the same network	-	20	25	30	35
<ul style="list-style-type: none"> ▪ <i>This data is to be given for each network for 2002-2003.</i> ▪ <i>Give the expected increased values for the subsequent years.</i> 							

Name of Networking Partner 3 JNTU, Institute of Science and Technology, Hyderabad.		Baseline Data (June 2003)	June 05	June 06	June 07	June 08
Increased cooperation and resource sharing between institutions	Number of faculty-days loaned for academic activities	3	5	7	9	11
	Number of student-days for which students sent to other institutions for curricular and extra-curricular activities	-	20	25	30	35
	Joint projects, consultancies, training programs, publications, seminars, workshops etc.	1	2	2	3	3
	Joint M. Tech. And Ph D programs	-	2	2	3	3
	Number of person-days for which labs, workshops and libraries utilized by faculty and students from other institutions within the same network	-	15	20	25	30
<ul style="list-style-type: none"> ▪ <i>This data is to be given for each network for 2002-2003.</i> ▪ <i>Give the expected increased values for the subsequent years.</i> 						

Name of Networking Partner 4 Osmania University College of Engineering, Hyderabad		Baseline Data (June 2003)	June 05	June 06	June 07	June 08
Increased cooperation and resource sharing between institutions	Number of faculty-days loaned for academic activities	-	2	3	4	5
	Number of student-days for which students sent to other institutions for curricular and extra-curricular activities	-	20	25	30	35
	Joint projects, consultancies, training programs, publications, seminars, workshops etc.	-	1	2	2	2
	Joint M. Tech. and Ph D programs	-	1	1	2	2
	Number of person-days for which labs, workshops and libraries utilized by faculty and students from other institutions within the same network	-	50	60	70	80
<ul style="list-style-type: none"> ▪ <i>This data is to be given for each network for 2002-2003.</i> ▪ <i>Give the expected increased values for the subsequent years.</i> 						

Name of Networking Partner 5 Rajiv Gandhi Memorial College of Engineering and Technology, Nandyal.		Baseline Data (June 2003)	June 05	June 06	June 07	June 08
Increased cooperation and resource sharing between institutions	Number of faculty-days loaned for academic activities	3	2	3	4	5
	Number of student-days for which students sent to other institutions for curricular and extra-curricular activities	-	10	15	20	25
	Joint projects, consultancies, training programs, publications, seminars, workshops etc.	1	1	1	2	2
	Joint M. Tech. and Ph D programs	-	1	1	1	1
	Number of person-days for which labs, workshops and libraries utilized by faculty and students from other institutions within the same network	-	5	10	15	20
<ul style="list-style-type: none"> ▪ <i>This data is to be given for each network for 2002-2003.</i> ▪ <i>Give the expected increased values for the subsequent years.</i> 						

		Baseline Data (June 2003)	June 05	June 06	June 07	June 08	
3.	Improved internal efficiency of the engineering education system	1. Number of teaching days in an academic year	180	180	180	180	
		2. Number of days of slippage from the announced academic calendar	Nil	Nil	Nil	Nil	
		3. Number of days for completing the admission process	80	60	55	50	45*
		4. Number of days for completion of semester examination	30	28	26	24	22
		5. Number of days for declaring results	60	55	50	45	40
		6. Number of Departments that Develop & Maintain question bank	All	All	All	All	All
		7. Office expenditure (excluding amount spent on maintenance of equipment and infrastructure in Rs. million)	2.0	1.9	1.8	1.7	1.6
		8. Average time taken to order equipment (from advertisement to supply/installation of equipment)	60	55	50	45	40
		9. Ratio of non-teaching staff to faculty	1.1:1	1.1:1	1.05:1	1.05:1	1:1
		10. Average number of days taken for recruitment (from date of advertisement to date of offer of appointment)	-	-	-	-	-
		a) For Faculty	60	60	55	50	45
		b) For all other staff	15	15	12	12	10
		11. Average No. of Faculty that are Computer Literate(%)	-	-	-	-	-
a) Teaching faculty	60	65	70	75	80		
b) Non Teaching Staff	20	25	30	35	40		
12. Extent of Computerized maintenance of student record	Medium	Medium	High	High	Very high		
13. Extent of Computerized maintenance of employee record	Low	Medium	Medium	High	High		

		14. Extent of computerization of administrative and financial processes	Medium	Medium	High	High	Very High
		15. Degree of decentralization of decision making	Medium	Medium	High	High	Very High
<ul style="list-style-type: none"> ▪ <i>The data should be given for each institution. For baseline data, the period/year for which required has been indicated.</i> ▪ <i>Give the expected changed values for subsequent years.</i> ▪ <i>For the last 4 parameters, give base and changed values in subjective terms – very low, low, medium, high, very high</i> 							

* Govt. of A.P. is conducting admissions for U.G.Courses. For PG courses the admission is very fast.

4.	Increased involvement of institutions with communities	Number of interactions with community	2	3	4	5	6
		Number of need/demand- based service programs carried out	1	2	3	3	3
		Number of technologies transferred	-	1	2	2	2
		Number of beneficiaries from skill-based training programs	-	25	30	35	40
<ul style="list-style-type: none"> ▪ <i>Baseline values to be given for 2003-04.</i> ▪ <i>Interactions with community to include interaction both within and outside the institution for the purpose of assessing community needs, identifying programs, preparing action plans for service programs. This should also include follow-up visits after completion of service programs and transfer of technologies.</i> 							
5.	Improved Planning and Management of Technical Education System to make it Demand Driven	Number of Management Training Programme organized	-	1	2	2	3
		Number of People trained in Planning & Management	-	25	20	25	30
		Number of new Engineering Programms started during the Project, which are forward looking and Demand Driven	-	1	1	1	1